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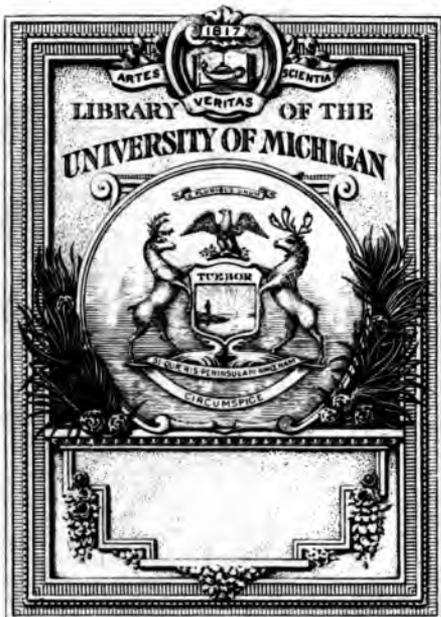
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TRAVELS
OF A
NATURALIST.

BY
A. BOUCARD.



LONDON, 1894.

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TRAVELS

OF A

NATURALIST.

A RECORD OF ADVENTURES, DISCOVERIES, HISTORY AND
CUSTOMS OF AMERICANS AND INDIANS, HABITS AND
DESCRIPTIONS OF ANIMALS, CHIEFLY MADE IN
NORTH AMERICA, CALIFORNIA, MEXICO,
CENTRAL AMERICA, COLUMBIA,
CHILI, ETC.,
DURING THE LAST FORTY-TWO YEARS.

BY

A. BOUCARD,

NATURALIST,

OFFICIER D'ACADÉMIE, KNIGHT OF THE ROYAL MILITARY ORDER OF THE CONCEPTION,
KNIGHT OFFICER OF THE ROYAL ORDER OF CAMBODIA, KNIGHT COMMANDER OF
THE ROYAL ORDER OF ISABEL, CORRESPONDING MEMBER OF THE ZOOLOGICAL
SOCIETY OF LONDON, OF THE GEOGRAPHICAL SOCIETY OF LISBON, OF THE
MUSEUM OF MADRID, MEMBER OF MANY SCIENTIFIC SOCIETIES,
ETC., ETC.

LONDON, 1894.

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TRAVELS OF A NATURALIST.

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TRAVELS OF A NATURALIST.

A RECORD OF ADVENTURES, DISCOVERIES, HISTORY, AND CUSTOMS OF AMERICANS AND INDIANS, HABITS AND DESCRIPTIONS OF ANIMALS, CHIEFLY MADE IN NORTH AMERICA, CALIFORNIA, MEXICO, CENTRAL AMERICA, COLUMBIA, CHILI, ETC., ETC., DURING THE LAST FORTY-TWO YEARS.

BY A. BOUCARD.

PREFACE.

ALTHOUGH forty-two years have elapsed since I sailed from Havre to San Francisco, *via* Cape Horn, as I have kept a diary of all my peregrinations, I think the best plan is to follow the same, and to relate successively all the wonderful adventures and discoveries as they were made during this long period of time, which embraces some of the most wonderful events of the nineteenth century, such as the discovery of gold in California, resulting in the opening of an Inter-oceanic route, *via* Nicaragua. Immense loss of property in San Francisco, the result of frequent conflagrations, which have only been equalled since, by the great fire of Chicago, Gambling hells of San Francisco. Expeditions of Marquis de Pingret and Count de Raousset, Boulbon in Mexico. Murders, frequently committed on returning successful miners from California. History of California, Acapulco, and Nicaragua, International Exhibition of New York, 1854. Epidemics of yellow fever in New Orleans, Habana, and Vera Cruz. History of Mexico. Reigns of Santa Anna, Comonfort, Alvarez, Zuloaga, Miramon, and Juarez. Mexican revolutions between the liberal and clerical parties, Intervention of England, France, and Spain in the affairs of Mexico. Occupation of Mexico by the French troops. Return to Europe. Second voyage to

Mexico. Reign of Maximilian, Emperor of Mexico. Evacuation of Mexico by the French troops. Battles between Maximilian, Miramon, and Mejia, against Juarez and Escobedo. Capitulation and tragic deaths of Maximilian and his faithful generals. Second return to Europe. Stay in Europe, International Exhibition of Paris, 1867. Third voyage to New York, International Exhibition of Philadelphia, 1876. Excursions to Boston, Cambridge, Niagara, Baltimore, Washington, etc. Scientific expedition in the Republics of Colombia, Costa Rica, Nicaragua, and Guatemala. History of these countries. Second visit to California. Return to New York, *via* Salt Lake City, Omaha, and Chicago. Third return to Europe, International Exhibition of Paris, 1878. Excursions in Belgium, Holland, Spain, Portugal and Italy. Second stay in England, International Exhibition of Paris, 1889, etc., etc.

A.B.

TRAVELS OF A NATURALIST.

CHAPTER I.

AT SEA.

Departure from Havre—Tempest in the Channel—Harbouring in Weymouth—Nearing the Tropics—Dead Sea—Wonderful Sunsets—Baptism of the Line—Crossing the Equator—Flying Fishes—Dolphins—Shark and Pilot Fishes—Sucking Fishes—Fishing Petrels—Giant Albatross—Cape Horn—Whalebone Whales—Cachalot Wales—Tempest—Juan Fernandez Island.

EMBARKED at Havre, on the 19th of January, 1851, in the sailing ship, *l'Union*, commanded by Captain Morley. From the 19th to the 26th we had very stormy weather, the rudder was broken, several yards were carried away, and we were compelled to put into the port of Weymouth to repair damages. A sad beginning for a voyage from Havre to San Francisco, round Cape Horn. We stayed at Weymouth five days. This was my first landing in England, the hospitable country, which, afterwards, I selected as a residence for many years.

In reading my diary, after forty-two years, I am very much amused with the juvenile remarks which I made then on Weymouth. The first thing I mention is that Weymouth is a pretty town, with picturesque green walks, from which a fine sea view is enjoyed. We went to the market, which was kept then on Wednesdays and Saturdays. On Saturdays, ladies finely dressed, were seen marketing, and I did consider it a very pretty and agreeable sight for visitors. As I have never been again to Weymouth, I don't know if it is still so. In the market we bought some fine and good apples, eight for twopence, which I thought cheap. We had a glass of beer at the Crown Hotel, and I made the remark that the ale was sweet and nice, and the porter very bitter and strong. I also noticed that the saloon was a fine room, and well heated, that there were no balconies to the houses, and lastly, my attention was called to the coaches; as of very good make and fine appearance, with accommodation for about fifteen people, the outside being reserved for gentlefolks.

Having completed our repairs, we left Weymouth on the 1st of February, with fine weather and a good breeze, which lasted until the 14th, during which time we made 1350 miles, leaving Madeira far back. During those days we saw many birds, porpoises, fishes, heteropods (*Nautilus*), and seaweeds, with large quantities of shells attached to them.

During the 15th, 16th, 17th, and 18th, we had very foul weather, and ran great dangers, all the passengers being sea-sick all these days, but fortunately, on the 19th the wind abated. We were then close to the Canary Islands, which coasts we saw plainly during several hours. Birds and tortoises were plentiful. Up to the 2nd of March we had beautiful and warm weather. On the 3rd of March we saw, for the first time, the Southern Cross, an indication that we were nearing the Equator. Up to the 9th, the wind left off entirely, and, during that time, we lost many miles, carried away back by adverse currents. Nothing is more tedious at sea than a complete calm; although I must say that I enjoyed it very much, fishing every day, notwithstanding the heat. We hooked many fishes, among which was one shark, measuring thirteen feet in length. It was rather an exciting scene to hoist the monster on board. When young, the flesh is eatable but not succulent. The one we caught was cut to pieces, the dorsal fin, skin, and jaw cleaned, and sold to a passenger as curiosities. Sticks are made with the dorsal fin. The vitality of these fishes is wonderful. After being cut into many pieces, the inside emptied of its contents, the head cut off, this last part retained sufficient strength to close its jaws on some objects if put into its mouth. It is also prudent not to approach its tail, with which it can give a blow, strong enough to break arms or legs of the careless looker-on. To avoid these dangers, the tail is securely fastened, and a stick of some sort is introduced between the jaws during the process of cutting and skinning. The skin is very hard, and can be used for the manufacture of bags and such like. These fishes are usually caught with a large hook baited with salted pork.

On the evening of the 9th of March we had the magnificent spectacle of a tropical sunset, which lasted about half-an-hour. The sky was covered with black clouds, lined with fiery gold and silver, and surrounded with every variety of colour, blue, rose, pink, orange, and red. Every minute or so there was a change of scenery, now representing animals of gigantic sizes, changing as quickly into castles, cathedrals,

towns, mountains with snowy peaks, lakes, and the like, as in a kaleidoscope. It is so magnificent that it must be seen to be believed. Some travellers say that the sun-rises are still more wonderful to look at, but for myself I can hardly see any difference between the beauties of both. We were enthusiastically admiring the conclusion of this grand sight, when we were disagreeably surprised by receiving on our heads showers of water, poured over by some sailors concealed among the yards, on the top of the masts. There was a momentary panic among the passengers, but it was soon explained to us that these showers of water was poured over by the assistants of *Neptune*, KING OF THE SEA, to greet us with the welcome knowledge that the next day we were expecting to pass the Line, the domain of his Majesty the King, who forbade travellers to pass that part of his realm without being first baptised. I think that this ancient custom, so dear and productive to sailors, is dispensed with now. This baptism is administered only once; so the old hands, who knew all about it, had taken care not to be on deck with the other passengers.

On the 10th of March, between 10 and 5 p.m., the sailors do nearly as much as they like. Knowing what is coming on, the passengers dress as scantily as possible. At 10 o'clock sharp the fun began by throwing water, flour, rotten eggs, and other missiles on the passengers and officers, who, including the captain, take part in the fun. Then a carnivalesque procession, headed by Neptune, strident in hand, and followed by Lucifer, policemen, verger, assistant carrying a basin of water, Father and Mother Line and followers, all of them in more or less eccentric costumes, made its appearance on deck and took position. A letter was then delivered to the captain by Neptune's secretary, with the injunction to read it to the passengers, which was forthwith done. In this letter King Neptune offers his felicitations to the captain for the safe arrival of the ship in this part of his domain, and requests him to deliver all the passengers and sailors who have not passed the Line before, reminding him that those who should try to pass without receiving the usual baptism would be condemned to be thrown overboard at once as food for the sharks. Of course, no one being willing to undergo that fate, all consented to be delivered into King Neptune's hands and receive the usual baptism. Then one by one was conducted to a mock chapel, erected on empty barrels, where those of wild tempers are rather badly treated, first by being shaved with a

gigantic wood razor, anointed with tar in guise of soap, after which ceremony, by cutting a rope maintaining your chair, standing over a barrel full of dirty water, you fall inside taking an involuntary dirty bath. Then it is the turn of another, until all the passengers and sailors have undergone the same ceremonial. During all that time there is a continual throwing of buckets of water, flour, eggs, etc., on one another. At 5 o'clock it concludes, and all go to wash and dress for a gala dinner, with champagne and other delicacies, which is usually given on that day, which ends with a comedy of some sort, acted by sailors and amateurs willing to help. As a rule this day of carnival is rather enjoyed by all, as, by giving a piece of four shillings to Father Line, you can escape from the worst parts of the day's proceedings. For my part I must confess that I did enjoy it thoroughly, these showers of water being rather agreeable with the hot temperature as we had on that day. On our ship all went well, and even the ladies took an active part in the fun of the day; but sometimes it happens that some of the passengers are not willing to part with their four shilling piece or oppose themselves to the baptism. In that case they are generally overpowered by the sailors and come out the worse for it.

On the 14th of March we felt the shock of a submarine earthquake. On the 15th, we crossed the Equator with a good breeze and splendid weather. Fish were plentiful, and many were harpooned. On the 21st we met the English ship *Ellen*, with whom we spoke. Flying fishes (*Exocætus volitans*), were very abundant. It is one of the most extraordinary sights of the tropical seas. The power of flight possessed by these fishes is not very great; but they can fly to a distance of about one hundred yards, and frequently fly so high that they fall on the deck of ships. This happens often enough when persecuted by large fishes, such as dolphins, albacores, and others. We also saw many sharks (*Galeocerdo arcticus*), some of a very large size. They were usually surrounded by pilot fishes (*Naucrates ductor*). This last fish is about the size and shape of the mackerel, and is marked with dark blue transverse bands passing round the body. Its name of pilot fish is derived from the belief that sailors have, that it acts as a pilot, directing sharks were to obtain a good meal. Certain it is, that when sharks are about the ship, there the pilot fishes are also, swimming round about and underneath them with perfect impunity, a good understanding existing apparently between them. Another fish,

which we have always found attached to sharks, is the sucking fish (*Echeneis remora*). This genus of fish is distinguished from all the others by the top of its head being flattened, and occupied by a laminated disc, composed of numerous transverse cartilaginous plates, the edges of which are spiny and directed obliquely backwards. By means of this apparatus, these fishes are able to attach themselves to ships, large fishes, and the like. In some countries, the inhabitants make use of these fishes to capture turtles. A ring is fastened to the tail, and a rope being attached to it, the sucking fish is carried out by the fishermen in their boat in a vessel of water, and thrown into the sea, where turtles abound. In endeavouring to make its escape, the fish attaches itself to the nearest turtle, and both are handed in together.

Another fish, which was very abundant, and often harpooned for the delicacy of its flesh, was the dolphin (*Coryphaena hippurus*). It is a brilliant golden fish about four feet in length, and is so swift in its motions, that it darts through the water like a radiant meteor. We have often seen them swimming round our ship when at full speed. Its dorsal fin is light blue, with golden reflections, the tail-fin and the body are green, and the belly is of a silvery lustre, separated from the back by a yellow lateral line. When swimming swiftly in the water there is an extraordinary display of colours upon it, and at night the effect is simply marvellous. After being caught, and shortly before dying, it presents a remarkable change of colour. The dolphins live chiefly upon the flying fishes. It is a grand sight to see, when a shoal of dolphins are in chase.

On the 26th of March, by 30.20 of latitude, and 30.40 of longitude, we sighted TRINIDAD ISLAND, and shortly after the rocks of MARTIN VAS.

On the 1st of April we were near Rio Janeiro, the capital of Brazil. The heat was intense. Numerous gulls were hovering round the ship.

On the 10th we saw some white pigeons, and on the 15th some petrels for the first time. During the night of the 16th we were overtaken by a tempest, which lasted twenty-four hours. Two sails were carried away, and the great yard was broken.

On the 18th we saw immense shoals of sardines, and a large quantity of Cape pigeons (*Daption capensis*), feeding upon them. On that day we had a very particular enjoyment,

that of catching these birds with fishing lines! They were very easily caught by baiting the hooks with salted pork. Scarcely had the line reached the water when many of these birds pounced on the baits, and one was caught, the hook penetrating in its upper mandible. Then it was an easy task to hoist it on board. We skinned several specimens. The Cape pigeon, or *Daption capensis*, is a bird belonging to the family of petrels, or *Procellariidae*. It is snow-white, beautifully spotted with brownish black. Hence their vulgar name, draught, or *damier* in French. The flesh of these birds is oily, and has a bad taste, nevertheless the sailors eat it.

On the 21st, we saw for the first time some albatrosses, or Cape sheep, as they are vulgarly called by sailors. We fished one of them, and made a fair skin of it. The albatrosses, the largest sea-birds known, belong also to the same family of *Procellariidae*. Many species are known; but the two usually met with in the South Atlantic are the *Diomedea culminata* and the giant albatross, or *Diomedea gigantea*. They are especially characterized by their beak being as long as their head, formed of several pieces and sharply hooked at the tip, their nostrils tubular at the base or on the side of the bill, their hind toe elevated and consisting merely of a claw, and the tarsi being reticulated, and usually shorter than the middle toe. They are oceanic birds, and generally found at sea at great distances. Their flight is rapid and powerful, and apparently they can keep it for days and nights together. When the sea is agitated, and the winds high, is when many are seen, seeking their food in the midst of the agitated waves. Sometimes they are seen resting on the waves, and it is with difficulty that they can take their flight again. They live chiefly on fishes, crustaceae, and carcasses. They seldom seek the land, except at the breeding season, when they build their nests in the holes of rocks. The flesh is a very poor eating. From the bones of the wings, sailors make pipe stems. The palms of the feet are made into tobacco pouches, and very good pillows and quilts are made with the feathers. The heads are kept as curiosities. The specimen we caught was about thirteen feet wide from the extremity of one wing to the other.

On the 22nd, we sighted PATAGONIA, Cape Blanc, and Pingouin's Islands were distinctly visible. In the evening we passed the Gulf of St. George. We saw many birds, vulgarly called *fools* (*Sula bassana*), and many stormy petrels (*Procellaria pelagica*), called satyrics by the sailors. This is the smallest known species of petrels. Seven species are known,

all of them very much alike, sooty black in colour, scarcely larger than a sparrow. They have the faculty of running lightly on the surface of the water, and with considerable rapidity. Hence the derivation of their name petrel, the navigators comparing them, on account of their habit of walking on the surface of the water, to St. Peter. Peterrill being a diminutive of Peter. It is very amusing to watch them when doing that exercise. Alike the other petrels they are voracious, and are easily caught with hooks. We secured several specimens, which were made into skins.

On the 26th of April, we sighted TIERRA DEL FUEGO and the Bay of San Sebastian. The weather was getting cold, and winter dresses came handy.

On the 29th, we sighted BELL'S MOUNTAIN, which is 1,250 feet high, NEW ISLAND, CAPE OF SAN DIEGO, and CAPE OF GOOD SUCCESS, all of them belonging to the STRAITS OF LEMAIRE, by which we wanted to cross to the Pacific Ocean; but, unfortunately, the bad weather that we experienced in these parts did not permit it. Up to the 4th of May we had very rough weather.

On the 4th of May, which was a Sunday, we sighted at last the celebrated CAPE HORN. It is a rock of several hundred feet in circumference, and seeming to rise about 50 feet over the sea. It is usually covered with snow. On that day we saw our first whale. It was a grand sight for me. The species seen was a specimen of *Balaena australis*, or whalebone whale. This animal belongs to the class *Mammalia*; order, *Cetacea*; family, *Balaenidae*; and genus, *Balaena*. They are marine, viviparous, suckle their young as other mammalia, respire by lungs, and have distinct separate blow-holes. They have warm blood, and have no teeth; these are replaced by plates of baleen, the well-known article of commerce. This family contains the whales known by the name of whalebone whales, which are of immense size, reaching sometimes fifty feet in length. About twelve species are known. The name *Balaena* is derived from the Phœnician word *Baalman*, which means, but incorrectly, the *King of Fishes*. It reigns over the innumerable tribes of marine animals. One of the peculiarities of the whales is the blowing of steam that they eject when in the act of breathing. This column of steam, which rises to a good height, has usually been erroneously taken for water. The head of this whale is of great size, being a third, and sometimes more, of the whole body, and the upper jaw is

furnished with plates of a horny structure, arranged transversally in rows of a triangular shape, and having their edges armed with long thread-like processes which hang loose in the mouth. These plates are from eight to ten feet long, and number about 300 on each side. These are the baleens, a valuable article of commerce, which sells in European markets from £200 to £300 per ton. Another important article of commerce procured from these whales is the oil, of which many thousand tons are annually brought to Europe; but lately this trade has somewhat decreased, in consequence of the scarcity of these mammals, which is felt more and more every day. Its food consists of small marine animals, crustaceae, molluscs, medusae, etc., the narrowness of its gullet preventing the passage of larger animals. With its bones harpoons and spears are made, and very good fishing lines with the threads of the whalebones. As a rule, it is a very quiet and tranquil animal, but when wounded, becomes quite furious, and very dangerous to approach. Its strength is prodigious, and occasionally, sailors, when fishing these animals, have been overturned, boat and all, and sometimes with loss of life.

On the 7th May, we sighted the ISLAND OF DIEGO RAMIREZ. It was excessively cold. Both water and oil were frozen. On that same day we sighted HERMITE'S ISLAND, explored in 1624 by the Dutch Admiral l'Hermite. The prolongation of these Islands is what forms the land known now-a-days on the maps, as CAPE HORN. It was discovered by M.M. *William Corneliszon* and *Jacob Lemaire* in 1615. It is situated in 55.58.41 latitude, and 69.30.17 longitude west. We sighted also ILDEFONSOS and BOAT'S ISLANDS, and we ran great dangers between these islands, which is a very dangerous passage for ships. We met an English sail going in the same direction as ours.

On the 9th of May, we met large quantities of whales, *Cachalots* or sperm whales, and whalebone whales. There is a great difference between these two mammals, which belong to two distinct families. The cachalot (*Physeter macrocephalus*) is distinguished from the whalebone whale by not having baleens, or whale bones, which are replaced by numerous conical teeth, the upper portion of the skull is more or less symmetrical. The external respiratory organ is single, the two nostrils uniting before they reach the surface, and usually in the form of a transverse crescentic valvular aperture, situated over the top of the head. When the mouth is open

it presents a cavity capable of containing a merchant ships jolly boat. The cachalot is also a very large animal, attaining sometimes fifty feet or more in length, and about thirty to forty feet in circumference. One whale occasionally yields more than twenty tons of pure oil, known as *sperm-oil*, and much used in the manufacture of candles. From the great cavity above the skull is extracted the oil called *spermaceti*, which is also much used for the same purpose and for ointments. The sperm oil is obtained from the thick layer of fat, or blubber, lying sometimes several feet in thickness under the skin. The substance called *ambergris*, largely used in perfumery, is a concretion formed in the intestines of the sperm whale, and is found floating on the surface of the seas which they inhabit.

On the 12th of May, we were again assailed by a tempest of wind, hail, and rain, which caused some minor damages. The hail stones were of a large pea size. Until the 1st of June we had rough and cold weather. Sometimes the wind was so strong that waves of immense size constantly shipped over the deck. It was dreadful to see these gigantic waves seemingly on our heads, as if they were going to swallow up the ship and all. In one instant we were on the top of one of them, as on the top of a hill with a sort of abyss under, in another we were at the bottom with the waves above us. You must experience it to have an exact idea of that fearful spectacle. But by this time all of us were more or less sailors made, and it did not affect us so much as the first gale experienced in the channel. The only inconvenience was to be obliged to remain in the saloon, and a little more or less fright with some of the passengers.

On the 1st of June, we were at the same latitude as VALPARAISO and in sight of JUAN FERNANDEZ ISLAND, the celebrated abode of Alexander Selkirk, so well known as Robinson Crusoe.

CHAPTER II.

Arrival at Valparaiso—Excursions in the Suburbs—Humming-birds—Gold Mines of Quillatas—Conquest by the Spaniards—Dutch Expeditions in Chili—Description of Chili—Boundaries—Topography—Climate—Earthquakes—Volcanoes—Lakes and Rivers—Actual Population—Santiago—Valparaiso—Mercantile Marine—Railroads—Commerce—Principal Articles of Importation and Exportation—Remarkable Animals—Llama and Alpaca—Chinchilla—Mole—Armadillo—Condor—Chilian Humming Birds—Chilian Insects—Future of Chili.

N the 8th of June we were at last in sight of VALPARAISO, after 142 days of navigation. We sighted the light-house at four in the morning. At that hour we had a fine breeze, and were going at the rate of eight miles an hour; but when only two miles from the bay, the wind suddenly abated, and we could go no further. The boats had to be lowered, and after several hours' hard rowing for the sailors, we entered the bay at one o'clock in the afternoon. After the visit of the sanitary inspector, we were allowed to land. I shall never forget the delightful impression which I experienced in landing for the first time on American soil. On that day we visited the city and the suburbs. When returning, we met a boy who had two humming-birds alive. We bought them for a few pence.

We remained only a few days in Valparaiso, but we employed our time well, and we enjoyed it very much. These days passed on land, after our long navigation, seemed to us paradise days. We scarcely could believe that we were on land again. First we visited the churches, which are very fine, and we were quite surprised to see them devoid of seats. The ladies usually kneel on small carpets, carried for that purpose by their maids, the men remaining standing, apart from the ladies. At the conclusion of the service, the young men group themselves in double file near the porch, so that the ladies have to pass between them, saluting and speaking to one another as they pass by. We visited the Tivoli Gardens, in the village of Polanco, and the Labadie's Garden, in the suburbs of the city. They are kept by French gardeners. It was there that I saw humming birds (*Eustephanus*

galeritus, Mol) for the first time. This I remember as one of the most remarkable epochs of my life. They were plentiful and flying about in all directions, from one flower to another, in search of food. When feeding, they introduce their bills, and sometimes the best part of their heads, in the calices of the flowers, and, during all the time, remain on the wing (exactly as the moths of the genus *Sphinx* do in Europe, on our flowers), and in a very short time extract the honey and all the minute insects, on which they feed, emerging from there with pollen, and even honey, on their foreheads. Not one single flower escapes detection. They continue this active exercise during the earlier hours of the morning, and until late in the afternoon. When the days are cloudy, they may be seen visiting flowers during all day; but usually as soon as the heat begins to be felt, they retire on their favourite dry branches and rest there. Occasionally they are seen starting with the rapidity of lightning in a straight direction and returning a little while after. This means that an intruder, often of the same species, has passed near by, and that it started in pursuit. During the nuptial time, they are quite warlike. They don't allow any other bird to approach their nests. Many times I have watched these Liliputians battles. During that time the humming-bird is fearless. If it fights a larger bird, it makes good use of its sword-like pointed bill, with which it inflicts such blows as it can on the head of the intruder. When it is with another humming bird, the sight is still more interesting. First, it starts straight at the intruder provoking it to fight, then they both rise perpendicularly to a great height where they are lost to sight, and in like manner they descend with the utmost rapidity until nearing the ground. This is repeated over and over again until the sudden escape of the intruder. The male always sits near the nest, and, in many species, sings during the incubation. It sits sometimes on the nest. The nest, which is one of the most admirable and delicate structures, scarcely larger than a walnut, is made of moss, intermixed together, and the inside filled up with vegetable silk, usually the produce of (*Bombax ceiba*) cotton or suchlike. It always contains two white eggs, scarcely larger than a large pea, but oval in form. The incubation lasts about sixteen days. The young at birth is entirely naked and helpless, hence its classification in the division PSILOPAEDES, Sundervall. A few days after birth, minute quills begin to appear all over the body, from which feathers grow little by little. On the twentieth day it is well furnished with them, and a few days after, it is able to fly

and feed by itself. During this time life is sustained by the introduction of food into the throat by means of the parents' bill. It is incredible how much food they require during their growth, especially the first few days after birth. The parents are constantly seen bringing food to their young. Their digestion is very active, as can be seen by the numerous excrements accumulated outside their nests.

These charming creatures, although allied in some respects to the Picarian birds, are quite distinct from all, and in 1876, I proposed for them the name of a new Order, (TTOCHILI.) At first, I met with a certain opposition, but I am happy to say that it is now accepted by many ornithologists, and last year, *Mr. Osbert Salvin*, the eminent English ornithologist, in the Catalogue of Birds in the British Museum, vol. xvi., 1892, page 27, has made use of that name, TROCHILI, as a Suborder for them. The principal characteristics of these birds are:—The second, third, and fourth toes directed forwards, the hallux backwards, the body very small, the bill very slender, the nostrils basal, linear, covered by an operculum, sometimes hidden in frontal feathers, the tongue slender, filiform capable of great extension, the wings narrow and pointed, the primaries, ten in number, stiff and long, the secondaries very short, the sternum large, the tail, composed of ten feathers, varying greatly in shape and size. Their plumage is of the most brilliant metallic hues in the males, although in several species they are sombre, and in some few the plumage of the females, usually tern, is as beautiful as that of the males. They surpass in brilliancy, and in variety of colours, that of the most precious stones, such as rubies, emeralds, topazes, amethysts, turquoises, sapphires, garnets, etc. They are the unequalled gems of Nature. Only in AMERICA and its adjacent islands, they are to be met with. Actually, we know over *five hundred distinct species*, and many more remain to be discovered. From immemorial times they have been admired, and their splendid feathers made use of for adorning the mantles of the Mexican and Peruvian Emperors, as also for the manufacture of superb mosaics, representing scenes of Indian life, portraits, and the like, and lastly, for millinery and jewelry purposes, such as mantles, soirées dresses, head gears, hat ornaments, earrings, brooches, etc. They are also used in the preparation of groups for the adornment of drawing-rooms; but, I am sorry to say, that a great destruction of these beautiful birds have been made of late for all these purposes, and I hope

that a strict regulation for the killing of these birds, only at fixed times, will be soon enforced by all the American Republics, or else, one day, we may have to deplore the total extermination of these splendid birds, one of the most conspicuous and wonderful sights, peculiar to the tropical countries of AMERICA.

Now-a-days that the mania of collecting is spread among all classes of society, and that everyone possess, either a gallery of pictures, aquarels, drawings, or a fine library, an album of postage stamps, a collection of embroideries, laces, fans, shoes, sticks, pipes, ethnological curios, arms, prints, handbills, watches, bronzes, buttons, and such like, a collection of humming-birds should be the one selected by ladies. It is as beautiful and much more varied than a collection of precious stones, and costs much less. Besides, it can be kept in one cabinet, which can be made to fit with the furniture of the most splendid palace, as that of the most modest home. Nothing can surpass in beauty and variety a collection of humming-birds. Many species of these charming birds can be bought at a nominal price, others are very scarce, and can scarcely be had in a life's time. Hence a constant and agreeable occupation for many years, and quite the thing for all those who have money, taste, and leisure.

During our stay in Valparaiso we made many interesting and pleasant excursions in the country, and we saw many rare animals and plants.

As I shall have no opportunity to speak again of this country, I shall give now a short description of Chili, its inhabitants, their customs, the rare animals found in Chili, and other facts which I consider of interest.

CHILI was discovered in 1536 by *Diego Almagro*. Almagro was of Spanish nationality, and inhabited Panama for some years. He first entered Chili by the valley COPAYAPA, through the Andes, where he lost many of his followers and horses from hardships and cold.

Copayapa bears that name from the turquoises, which a mountain there produces in great abundance. This valley is said to be one of the most fruitful of all Chili. It produces the best maize (*Indian corn*), each ear being over one foot and the stalk five feet long; each grain sown yields at least three hundred in harvest.

Through the midst of COPAYAPA runs a river of the same denomination, and twenty leagues in length from the Andes, and at its mouth has a convenient harbour.

From there he went in the valley CHILI, which gives its name to the whole country. In that valley are the famous gold mines of QUILLATAS, from whence Valdivia, in 1544, carried an invaluable treasure. The South Sea makes here a large and convenient harbour.

Almagro did not remain long in Chili. In 1541 he was succeeded in his attempt to conquer that country by Valdivia, who was partly successful. When Sir Francis Drake visited this place in 1577, he was driven away, with great loss, by the Spaniards.

In Valparaiso, which he also visited about the same time, he took a ship from VALDIVIA, laden with two thousand four hundred bars of gold. But the Netherland Admiral, *Foris Spilbergen*, who went there in 1615, had not such a good success.

At the time when *Oliver van Noort* anchored there in 1600, the Governor, *Franciso de Quinones*, commanded seven hundred Spanish soldiers to reduce the revolted Chillians.

Elias Herkmans was once nearly taking possession of MARIA ISLAND for the Netherlands.

MOCHA ISLAND, belonging to *Arauco*, was first inhabited by *Juan Claessoon*, a Dutchman, condemned for some crime to be landed there. This was in 1600.

Fifteen years after, *Spilbergen* landing there with four boats, found the shore full of people, who had brought all sorts of provisions to barter against axes and knives. The islanders going aboard wondered to see the soldiers drawn out in order, and much more when a gun was fired. They furnished the Hollanders with a hundred sheep, amongst which was one with an extraordinary long neck, and the body marked like a camel. This was certainly a specimen of llama (*Auchenia lama*).

In this island a man could marry as many wives as he could maintain. They all lived peaceably with one another, and went clothed with a pair of breeches and frock without sleeves. The women tied their hair in braids; but the men let it hang down carelessly.

The Netherlands Admiral, *Hendrick Brewer*, when he landed on the coast of GUADALANQUEN in 1643, was informed by the Chilians that years before they had burned Valdivia, murdered the Spanish that were in garrison, and poured melted gold into the Governor's throat and into his ears, and

made a drinking cup of his skull, and trumpets of his bones. This is said to have been the sad end of General Valdivia.

On the shore of the river LEBO, *Garcia Mendoza* built the town Canete, which, not long after, was deserted by reason of the wars with the Chilians. He built also the towns of *Nueva Londres*, in the province of CALCHAQUI, and *Cordova*, in the territory of the *Furies*; but they were also soon deserted.

After many cruel wars with the natives, the Spaniards conquered all the country, excepting Araucania, and retained it until 1810, when Chili, in conjunction with Buenos Ayres and Colombia, raised the cry of Independence. Since, it has greatly developed, and is now one of the most prosperous of the South American Republics.

In consequence of its very favourable climate, which is neither too warm nor too cold, Chili has been selected by many English, French, Americans, Italians, and others, as a place of residence, and they have much contributed to the welfare and prosperity of the country. Lately Chili has much suffered from a cruel and long civil war, with great losses on both sides; but it is to be hoped, now that it has concluded, that a new and lasting era of peace and prosperity has commenced for that country.

The Republic of Chili occupies the narrow strip of country lying along the south-western part of South America, between the Andes and the Pacific Ocean. It extends from the Camarones River on the north, separating it from Peru, to Cape Horn in the south. The treaty made with the Argentine Republic in 1881, gave to Chili the greater part of Tierra del Fuego and the Straits of Magellan, taking Cape Virgin, on the Atlantic, for its starting point, running directly south to the Ocean, and west to the summit of Mount Aymon, thence along the northern shore of the Straits of Magellan, to where it intercepts the 52nd parallel of latitude, in longitude 70° west. Thence the lines follow the summit of the Andes to the northern extremity of the two countries.

A lower range of mountains, called the Cordillera of the Coast, runs parallel with the lofty Andes, and walls in the great central plain, leaving only narrow passes for the rivers which descend from the Andes. Its actual area is about 300,000 square miles.

The narrow fertile strip of land which forms the territory of Chili may be regarded as the skirt of the Andes, sloping

rapidly towards the Pacific, and traversed by numerous rivers which fertilize it. The peculiarity of this territory, apart from the diversity of its climate, which varies from that of the tropics to that of the antarctic regions, is the variety of its geological and topographical structures.

The first, or northern zone, which includes the provinces of Atacama and Coquimbo, the territories of Antofagasta and Tarapaca, is the most sterile, but prodigiously rich in minerals, especially silver, copper, saltpetre, borax, and gypsum.

The second zone, which commences at the Aconcagua river, and extends to *Bio-Bio*, the king of Chilian rivers, may be denominated the agricultural zone. It is formed of a series of extensive valleys of rich soil, yielding abundant crops of cereals. Fossil remains of extinct species of animals are frequently found in this zone.

The breadth of these valleys vary from 25 to 50 miles, and occupies from 150 to 180 miles from the Andes to the Pacific.

The third zone, which extends from *Bio-Bio* to the Tolten river, is still occupied by the valourous Araucanian Indians, who never were conquered by the Spaniards; but the white race is rapidly encroaching upon these fertile lands, and before long these fierce and independent Indians will have to submit to the Chilian Republic, or to disperse in the Pampas. Actually they number about forty thousand.

The fourth zone includes the system of lakes, not yet drained by plutonic action, as were those at the north. Of these, the Andina lake, *Villa-Rica*, the source of the Tolten river, 24 miles in circumference, is the most picturesque, and Lake Llanquihue, thirty miles from the coast, is the largest. It is triangular in form, twenty to thirty miles across. This zone includes all the southern end of Chili, and is the section of the primeval forests.

The climate of these sections has the same variety as their latitudes. In the deserts of Antofagasta and Atacama it scarcely rains at all; meanwhile in Chiloe and Valdivia it rains nearly all the year. In general the climate is mild and healthy.

The winter months are June, July, and August; the summer months are December, January, and February. In the second zone, where are situated *Valparaiso* and *Santiago*, it seldom rains except during the winter months.

The mean temperature in that zone is 70° in summer, and 52° in winter, and for the year 61° .

Earthquakes are frequent, and have caused great destruction. Those of 1647, 1730, 1751, 1822, and 1835, have been terrific, and destroyed the cities of *Santiago*, *Valparaiso*, and *Concepcion*.

The Andes, of which the most southerly peak forms *Cape Horn*, (where they say that gold has just been discovered in large quantity), present in Chili an immense range, their course being north and south. Their base has a uniform breadth of about one hundred and fifty miles. The rivers rising in them run almost parallel at right angles to the Pacific, and cut the mountains with immense gorges and cañons. The mean altitude of the Andes is from eight thousand to ten thousand feet. Not less than seventy volcanoes, extinct and active, crown the range of the Chilean Andes. The most noted peaks are the following: *Mount Aconcagua*, 24,418 feet, *Mount Tupungato*, 21,104 feet, *Mount Maipo*, 17,660 feet, *Mount San José*, 18,145 feet, in activity since 1881. *Mount Villa Rica*, 15,990 feet, and several others, ranging from 6,000 to 10,000 feet.

Chili possesses many islands, the most notable of which are JUAN FERNANDEZ, four hundred miles west of Valparaiso, MOCHA ISLAND, PASCUA ISLAND, and CHILOE ISLANDS, with its numerous Archipelagoes.

The rivers of Chili are counted by the hundred, but very few are navigable. The principal ones on the northern zone are the COPIAPO, watering the valley and city of that name; the COQUIMBO, the LIMARI, the CHOAPA, and the LIGUA.

From the Maule, south, the larger rivers are navigable, but only for small vessels. The MAULE is navigable to PERALES, the BIO-BIO to CONCEPCION, the VALDIVIA to VALDIVIA CITY, at whose wharves the ocean steamers call; and the BUENO to OSORNO.

The population of Chili, according to the last census, 1890? was 2,766,747, which shows an augmentation of 690,776 since the census made in 1875, of which about 50,000 are foreign born. There are 41 cities, 78 corporate towns, 186 villages, 83 hamlets, and 35 ports belonging to seventeen provinces, 60 departments, 682 sub-delegations, and 2738 districts.

The principal provinces are those of SANTIAGO, VALPARAISO, COQUIMBO, CONCEPCION, COLCHAGUA, NUBLE, and ACONCAGUA, with a population of about 1,500,000.

The principal cities are the following :—SANTIAGO, VALPARAISO, TALCA, CONCEPCION, SERENA, COPIAPO, IQUIQUE, and ANTOFOGASTA. First of all stands SANTIAGO, the Capital of the Republic, with a population of about 200,000. It was founded in 1541 by the Conqueror Pedro de Valdivia. Its situation is in an extensive valley called MAPOCHO, bounded on the east by the Cordillera, on the west by the mountains Prado and Poanque, on the north by the small river Colina, and on the south by the river Mapocho, which passes the city on one side, and feeds many *assequies*, or small canals, for irrigation. It also supplies the city with water.

The city is divided into squares, about one-hundred-and-fifty, marked out by the streets, which are well paved, broad, and clean. Besides many sumptuous private buildings, belonging to wealthy owners of mines, and large landed proprietors, there are some important ones, such as the Mint, the Presidential Palace, the Cathedral, the University, with a Museum of Natural History, under the direction of the Venerable and well-known Scientist, Doctor R. A. Philippi, and many other Colleges, Hospitals, etc. Most of the private houses are built in the old Spanish style, and only one story high, as a precaution against the earthquakes.

The bridge across the Mapocho is a handsome structure. Close by is the Alameda, or public promenade, forming a triple avenue more than half-a-mile long, and much frequented by foot passengers. The middle one, planted with a double row of Lombard poplars, serves for the carriages and horses.

Mirth and gaiety preside in the Chilian society, and foreigners are received with much friendship and conviviality.

Next in importance stands VALPARAISO, or *Vale of Paradise*, the most important port of Chili, with about 120,000 inhabitants, according to the last census. The bay is of a semi-circular form, surrounded by very steep hills which rise abruptly almost from the edge of the water, particularly to the southward. The principal part of the town is built between the cliffs and the sea. The principal street faces the bay and forms the great artery of Valparaiso, and is skirted by elegant warehouses, banks, government and other private buildings. A great activity always reigns here. At the back, the houses rise one above another, forming a species of amphitheatre, which, when first seen from the sea, have a most beautiful and picturesque appearance. At night the sight is more peculiar still, the lights being scattered about the

hills in every direction, giving the appearance of a general illumination.

It is in this city that the foreign element in the population is more considerable. European and American are well represented, and French, English, Italian, and German languages are heard on all sides as much as Spanish. The tone of society is very agreeable and friendly. Once introduced you are always sure of a hearty welcome.

The bay of Valparaiso is large and beautiful, alive with fishes, but very badly protected from the north winds. Tempests are very frequent in the months of June and July, and the only way to avoid the danger of being wrecked is by going at large, and returning when it has ceased ; but even by so doing, complete security is not always obtained, and many are the ships which are annually lost in these parts. In the winter of 1823, during a *norther*, as they are called, eighteen vessels were totally lost in twenty-four hours. There are fine steamship companies doing business on the coast, the principal is the Pacific Steam Navigation Company, of England, sailing weekly to England via Panama, and bi-monthly by the Straits of Magellan.

In 1883, Chili had in operation 1,102 miles of railroad, and surveys were being made for the speedy construction of as many more. Chili is the first country of South America which inaugurated the construction of a railroad, that from Caldera to Copiapo, in 1850.

The commerce of the Republic is very prosperous, and by reason of its agricultural products for export, and its extraordinary mineral riches, is one of the great markets of the world.

The importation of foreign goods can be estimated at about £10,000,000, chiefly in Articles of food, Textile fabrics, Clothing, Jewellery, Machines, Furniture, Tobacco, Drugs, Wines and liquors, Material for railways, etc., etc. England is the largest importer, France and Germany come next, and the United States holds the fourth place. The principal articles of exportation are wheat, flour, barley, wool, hides, skins, wines, silver and copper in bars, ingots, or ores.

In the animal kingdom, Chili possesses some remarkable forms, some of them peculiar to that country, and others which are also found in the neighbouring Republics of Bolivia, Peru, and Argentine. Among the Mammals the *Huanaco* and the *Vicuna*, usually called *Llama* and *Alpaca*, when

domesticated, are very conspicuous and remarkable, as closely allied to the Camels, although their backs are not humped. They are natives of the Andes, easily domesticated, and extensively used as beasts of burden, but they cannot carry heavy loads. If overladen, they kneel on the soil, and will not rise until the load has been lightened. Their wool, especially that of the *Alpaca*, is long and fine, and of considerable value for the manufacture of valuable clothes. In a wild state, the llamas keep together in herds, sometimes of one or two hundred. When disturbed, they gallop off with great rapidity. In many of their habits they are like a flock of sheep, and are not difficult to be caught. They have the habit of jumping and kicking with their hind legs. Unfortunately, these animals are fast disappearing.

Next comes several species of *Chinchilla* or *Lagotis*, belonging to the Order of RODENTS, or GNAWING MAMMALS. They are beautiful creatures, about the size of a squirrel, measuring about nine inches, exclusive of the tail. They are remarkable for their fur, which is long, thick, close, somewhat crisped, very soft, and of a pearly grey. An extensive trade is carried on with these skins, which find their employ in the manufacture of muffs, tippetts, lining of cloaks, pelisses, etc. They fetch a very good price in Europe. These interesting animals live in holes under ground, are very sociable and very timid. They are found in considerable numbers in the mountainous parts of the country.

Another remarkable form among the Chilian mammals is the extraordinary Mole-Armadillo (*Chlamyphorus truncatus*), belonging to the family of *Dasypodidae*, a pigmy, when compared to his gigantic predecessor *Glyptodon*, a fossil species, which was certainly more than a thousand times larger. Like all the other species of Armadilloes, it leads a subterranean life. It is the smallest and the rarest of the species known, scarcely larger than a mole, hence its name. In structure it differs from the other Armadilloes in having the outer shield attached to the hip bones by a peculiar bony process; meanwhile, in *Dasypus*, the shield is imbedded in the skin of the body, with the central rings free and the tail exerted. About twenty living species are known, the largest being *Priodon maximus*, the Giant Armadillo, measuring three feet in length. They walk on the soles of their feet, with the claws expanded, and are able to burrow in the soil with surprising rapidity, either to escape danger or in search of their food, which consists of insects, worms, etc.

When surprised out of their burrows, they roll themselves up in the form of a ball, and easily escape detection from their enemies, but not from man, who secure them very easily. Its flesh, which is white and tender, is exquisite to eat. They are only found in the tropical countries of America. In the the old World, they are represented by the *Manidae*, or *Pangolins*.

Among the Chilian birds, the most remarkable species is the *Condor*, *Sarcoramphus gryphus*, belonging to the family of *Vulturidæ*. This giant bird is a native of the Andes, choosing its breeding place between an altitude from 10,000 to 16,000 feet; but they are also seen frequently on the coast, especially when in search of carrion. Flocks are never seen except around a large carcase. Otherwise they are met singly, soaring at great height in vast circles. Its flight is slow and majestic. Its head is constantly in motion as in search of food. To rise from the ground, it must needs run for some distance, then it flaps its wings three or four times, and ascends at a low angle, till it reaches a considerable elevation, when it seems to make a few leisurely strokes, as if to ease its wings, and moving in large curves it glides along without the least apparent vibratory motion. In walking the wings trail on the ground, and it has a very awkward gait. When well gorged with food, it is slow in its movements and stupid, and is easily captured. Although a carrion bird, it also feeds on calves, sheep, dogs, or the like, when it has the chance. It has been said and written that children have been carried away by this bird; but I doubt that any authenticated case has ever been proved.

They are most commonly seen standing on rocks, around vertical cliffs, where their nests are. It lays two white eggs, three or four inches long, on an inaccessible ledge. It makes no nest proper, but places a few sticks around the eggs. It is very difficult to get at them, and they are still rare in the collections. Incubation occupies about seven weeks, and takes place in the months of April and May. The young at birth are scarcely covered with a dirty white down, and it takes a considerable time before they can fly. No one has ever been able to state satisfactorily how long they are fed by their parents, but it is probable that it is not much shorter than a year. They are as downy as goslings until they nearly equal in size a full grown bird. During all that time they are very voracious, and the parents are constantly chasing for their support.

A second species, *Sarcoramphus aequatorialis*, has been described some years ago by Mr. Sharpe; but having actually in my possession one specimen agreeing exactly with the type now in the British Museum, I am of opinion that it is only a young male, aged three or four years, and that it is the usual plumage of that age. It is then brown, or ash colour, all over, meanwhile the fully adult plumage of *Sarcoramphus gryphus* is black, with secondaries exteriorly edged with white, and a downy white ruff on the upper part and sides of neck. This last is naked and of a good size; the skin lies in folds in the male. The caruncles on the head of the adult males are well developed, and have somewhat the shape of a crown. A full grown bird measures from twelve to thirteen feet. The olfactory organs are well developed, and it has been said that it has an extraordinary power of scent; but I am more inclined to attribute the faculty of detecting their proper food, at considerable distances, to their sight, which must be prodigious. Life is scarcely extinct when flocks of these birds, invisible to naked eyes, pounce upon their prey.

Another species of birds, peculiar to the Andes, is the GIANT HUMMING-BIRD, *Patagona gigas*. It is about the size of a swallow, dark brown all over, with a white patch on the rump. It is found at great altitudes.

Four other species of Humming-birds, *Eustephanus galeritus*, *burtoni*, *fernandensis*, and *leyboldi*, are only found in Chili and the adjacent islands of *Juan Fernandez* and *Mas-a-fuera*. No other species of that genus has ever been found anywhere else. They are beautiful birds.

Among the Insects many remarkable forms exist nowhere else, especially amongst the *Carabidae*, *Lucanidae*, and *Scarabaeidae*. The most interesting among these are those belonging to the common European genus, *Carabus*, which is represented by a fine series of about twenty species, most of them adorned with bright metallic colours, coppery-gold, coppery-red, or coppery-blue. Among the *Lucanidae*, or Stag-beetles, I will mention the peculiar form of *Chiasognathus Grantii*, only found in Chili. Amongst the *Scarabaeidae*, or *Lamellicorns*, the interesting genera, *Cotalpa*, *Oogenius*, *Modialis*, and others, peculiar to Chili. The same can be said of the vegetable and mineral Kingdoms, all of which proves that Chili is a favoured country as regards its natural products, its climate, and its inhabitants, and has in perspective a magnificent future.

CHAPTER III.

AT SEA.

Departure from Valparaiso—Islands of San Felix and San Ambrose—Phaeton and Frigate Birds—Bonito Fish—Eclipse of the Moon—Dorado Fish—Passage of the Tropic—Tunny Fish—Floating Varc—In Sight of San Francisco—Heavy Fog—Pelicans, Porpoises, Sea-Lions, or Seals—Bay of San Francisco—Guillemots—Arrival at San Francisco.

N the 14th of June we sailed from Valparaiso, but for want of wind we were obliged to return to the bay for the night. On the 15th, which was a Sunday, the boats were lowered, and the sailors had to tow the ship for several hours, as there was no wind whatever; but in the evening a good breeze, which lasted up to the 18th, took us a long way from the coast.

On the 19th, a northern overtook us, and we had several miserable days and nights to endure, besides the constant danger of being wrecked. Afterwards, we learnt that this northern had been also felt in Valparaiso, and that several ships were lost.

On the 20th, the northern abated, and we progressed satisfactorily. On the 22nd, we sighted San Felix, and San Ambrose Islands. When in view of these islands, an extraordinary mirage appeared to us. Ships were seen anchored in the bay of San Felix, a large town defended by a fortress; country houses, etc., were visible on shore, and the captain was very much puzzled about the whole thing. He did not leave the marine glass for a moment. This extraordinary vision lasted all the time that we were in sight of the island, which is marked on the map as uninhabited.

On the 28th, and following days, we saw many Phaeton and Frigate birds. The former one is a beautiful white bird, with two long narrow feathers projecting from the tail, from which it takes its French name of "*Paille en queue*." It belongs to the order *Gaviae*, and the family *Phaetonidae*. Only three species are known, *Phaeton aethereus*, *flavirostris* and *rubricaudus*. They are closely allied to the Petrels

and Sea-swallows. They have a long, pointed, and strong bill, slightly curved at the end, and denticulate on its edges, short feet, the toes all united by a membrane, like all the *Palmipedes*; the wings are narrow and very long, the tail is short, but with two middle feathers very narrow and long, in consequence of which sailors usually call them "Boatswain bird." The Phaetons, or Tropic birds, are Oceanic birds, and are generally met with far out at sea flying very high and very rapidly. They feed on fish, and are especially fond of flying-fish. They breed on the most unfrequented islands, and place their nests in the most inaccessible concavities of rocks.

The Frigate bird belongs to the order of STEGANOPODES, and to the family of *Pelecanidae*. The sub-family *Atageninae* has been made for the two species known:—*Atagen aquilus* and *minor*; but I am of opinion that they ought to be separated from the true Pelicans, and united with *Graculus* and other allied genera, under the family name of GRACULIDAE. They have also been named *Tachypetes* and *Fregata* by various authors; the last name was given to them in consequence of the rapidity of their flight, from which the vulgar name of *Man of war* has also been bestowed on the bird. *Atagen aquilus*, the species seen by us, is found in all the tropical seas. It is entirely black, glossed with green and blue on the back of the neck. It has a red pouch of a good size. The body is light, the size of its wings immense in proportion, its tail long and much forked, so that it possesses not only great rapidity of flight, but can maintain it for a very long time; its bill is longer than the head and hooked at the tip, the feet are membranous.

The Frigate bird is very voracious, and is met far out at sea. It feeds on fish, and it has the very curious habit of attacking the gulls until these birds disgorge the fish they have captured, which is immediately swallowed by its persecutor. It is a very interesting and amusing sight. When flying high, and gliding apparently motionless in the air, it has the appearance of a kite. Its sight is very keen. It builds its nests on rocks, high cliffs, or lofty trees in uninhabited islands. The eggs are of a carnation colour, dotted with crimson.

On the 30th, we saw large quantities of birds—phaetons, frigates, gulls, and others, all of them feeding on flying fish, which were very abundant. Not only birds were persecuting these fishes, but also larger species of fish, principally dolphins and bonitos.

We harpooned several of them. The bonito, *Scamber pelamys*, is a fish belonging to the order *Acanthopterygi*, and to the family of *Scombridae*, or mackerels. It is very abundant, and is always seen in shoals. It is a very pretty fish of a fine blue colour, with four dark lines extending from the pectorals along the side of the belly to the tail. It reaches about two feet in length. Its flesh is delicious eating.

During the night of the 11th of July, we passed the Equator. On the 12th, we had the rare and magnificent spectacle of an Eclipse of the Moon, of which we could observe all the phases at leisure. The night was splendid, and the weather warm. On the 27th, we passed the Tropic, and we saw large quantities of *John Dorys* (or *Dorades* in French) and Tunny fishes. We caught some of both. The John Dory belongs to the family of *Scombridae*, or mackerels. I think the species we caught was *Zeus opah*, or king fish. It is a superb fish brilliantly coloured, measuring between four and five feet in length. It is apparently destitute of scales, and perfectly smooth. The body is very high and compressed, and the mouth has a few small erect teeth. The scales are very small and satin like. They have one single dorsal fin, and a short tail. It has a metallic lustre of a gray-silvery colour, traversed with yellowish bands, and has a black mark on each side of the back. It is very delicate and excellent eating. It is supposed that the fish which St. Peter took out from the sea, by command of Jesus Christ, and in whose body the piece of money required for paying the tribute was found, was one of these fishes.

The tunny-fishes, THYNNUS, belong also to the same family, and one species *Thynnus thynnus*, is very abundant in the Mediterranean, where it is caught in very large quantities, preserved in oil and otherwise, and sent to all parts of the world.

Up to the 12th of August we had very fair weather, a good breeze, and an average heat of about 30° Réaumur. It was excessively pleasant to all, and very different to what we had experienced in the Atlantic. Every day we could admire the magnificent sunrises and sunsets, which are constantly to be seen in the Pacific. The currents were also in our favour, so everyone was content. As we were nearing San Francisco, many of the passengers were already making their plans with regard to their future movements. The majority of them were going to California, with the intention of trying their luck in the gold diggings; we shall see later on how few of them

succeeded; but for the present everyone was in good health and spirits. Many friendships had been contracted on board, and some were sorry to think that in a few days they would have to part, each one on his own way, perhaps never to meet again.

We passed the time in playing chess, draughts, dominoes, cards and other games, while others were reading, writing, or seated in rocking chairs for hours, and on the whole very good harmony existed amongst the passengers, officers and sailors, during the voyage.

On Sundays, we had concerts, and sometimes comedy. The performers were passengers and sailors, some of whom were really good players, and time passed agreeably and quickly.

On that day, dinner was more selected, and good wines, including champagne, were liberally given. During all our voyage, there was no death. Excepting sea-sickness, and that only for a short time, the health of all remained excellent all the time, a good proof of the excellent treatment bestowed upon us. In fact, all our officers were not only first-class mariners, but very cordial with all, and we liked them very much. For my part, like the boy that I was, I made friends with all, and I had a great time of it. From the Captain and other officers, I learned a great deal about the places that we passed, all the nautical terms used on board, etc. With their assistance, I pointed on a map, which I possess still, our track day by day, and now after forty-two years, it is a real treat for me to look over this map and peruse the route made then. With the sailors, I learned to climb on the masts, the names of the masts, yards, sails, cords, etc. I caught many birds and fishes, and enjoyed it more and more every day; but it is time to go on with my narrative.

On the 13th, we met with large quantities of floating varec and also some trunks of trees, proceeding probably from the Sacramento river, or its tributary streams. Many sailing ships going in the same direction as ours were in sight.

On the 14th, ten different vessels, French, English, American, Spanish, and Dutch, were in view. We could see the coast of San Francisco. Life was very active. Pelicans, porpoises, and other fish were plentiful. The first we had not seen before; but we often met shoals of the second, both in the Atlantic and Pacific. It is one of the most interesting sights of the sea.

The porpoise is a Mammalia of the order CETACEA,

family DELPHINIDAE. This family consists of true dolphins or bottle-noses and porpoises. The larger species are dignified by the name of whales. The Narwhal, or sea unicorn, belongs to this family. Nothing can be more interesting at sea than to watch a shoal of porpoises disporting themselves round the ship. They swim with the utmost rapidity, and distance easily the fastest steamers. The agility and grace of their movements in the water are always watched with admiration. They are very abundant in all seas. Their principal food is fish. The species mostly met with, was the common porpoise, *Phocaena communis*, derived from the Italian name, porco-pesce, or hog-fish. It is about six feet in length, and is of a bluish-black colour on the back, and white underneath. The whole body is covered with a layer of fat, nearly an inch in thickness, and the flesh beneath is red and resembles that of the hog. It has numerous small sharp teeth in both jaws, and a dorsal fin in the middle of the body. For hours they will follow the same direction as the ship, constantly rolling and tumbling over the water, and passing from one side of the ship to the other. They feed on fish, and are seen sometimes on shore, searching for food in the soil, like hogs. Their flesh is considered very good, and tastes somewhat like that of beef. The oil procured from the blubber is of the purest kind and very valuable. With the skin, duly prepared, coverings for carriages and wearing apparels are made. Lately I have had a pair of boots made of porpoise skin, and I have not been able to wear them out. It is quite impermeable, and the right thing for hunting or fishing purposes.

The Narwhal, *Monodon monoceros*, belongs to this family, but differs greatly from all the others by its dentition. It has only two teeth, both of which lie horizontally in the upper jaw. In the female, both remain concealed within the bone of the jaw, so that this sex is practically toothless; but in the male, while the right tooth remains concealed and abortive in general, the left is immensely developed, attaining more than half the whole length of the animal. In some, both teeth are fully developed, but this is very rare. The use of this tooth, or spiral twisted tusk, is not known, but I think it must be used as an offensive and defensive weapon.

The Narwhals inhabit the Arctic regions, where they are abundant, and met with in shoals of twenty or more. They are often seen sporting about the ships, like the porpoises. They feed on fish, molluscæ and crustaceæ.

They attain a length of from twenty to thirty feet, and have a tusk in proportion. A superior quality of oil is extracted from the blubber, and is considered as a great delicacy by the Greenlanders. The ivory of the tusks is exceedingly dense and hard, white, and easily polished. It constitutes a valuable article of commerce, but it is getting scarce. The celebrated throne of the Danish kings is made of these tusks.

In the evening of the 14th, the pilot arrived on board. It was great excitement for those who spoke English. Everyone was anxious to have news of San Francisco, the placers, etc. We were about thirty miles from that town, and with the hope of arriving there in the night, when we were surrounded by such a dense fog that nothing could be seen three yards ahead. It was just as bad as what we know as a London November fog.

In the circumstances, the pilot said that it was quite useless to try the passage of the channel that night, so we had to bring down all sails and try to keep our position until the morrow. During the night, many whales were seen quite close to the ship, and early the next morning, when the fog cleared a little, we saw large quantities of birds, fishes, cetaceæ, and seals around the ship.

Among the birds, the most conspicuous were gulls, terns, grebes, and guillemots, *Uria grylle*. This last species is found all over the world; but this is the great place for them. All the uninhabited islands near the coast of California, and even in the bay of San Francisco, are crowded with these birds, and in the breeding season, boat-loads of their eggs arrive every day in the San Francisco market.

The Guillemot belongs to the order of IMPENNES, family URIIDAE. It is web-footed, and closely allied to the penguins, and to the auks, which family includes also the now supposed extinct species *Chenalopex impennis*, or Great Auk. The actual value of a good skin of the great auk is between £300 and £400, and the last egg of this species sold in London three years ago, fetched £160.

The Guillemot is a bird of the size of a goose. It has a straight bill arched at the point and with a notch, its tail is short, the wings are extremely short. It is brownish-black above and white underneath. It breeds in vast numbers on the narrow ledges of rocks, where they may be seen in successive rows one above another. In some uninhabited rocky islands, they can be seen in thousands, occupying all

available spaces, and a passage can only be effected by treading upon the eggs. They are supposed to lay from two to three eggs, but this is not quite certain, and I am of opinion that they are more prolific, because the amount of eggs gathered in their places of breeding is prodigious. They are of a large size, about one-third larger than that of a turkey, and pointed at one end. In colour they vary greatly, from white to pale blue, with brownish or black spots sprinkled all over, especially in the middle, and representing all sorts of arabesque figures. The young ones are sometimes eaten; but the flesh of the adults is oily and has a disagreeable taste. They swim with great rapidity, and dive frequently, reappearing at a distance of fifty yards or more. They live on fish, crustaceæ, and molluscæ.

Lately thousands of these birds have been killed for the sake of their feathers; but these have a very low market value, and are not worth gathering.

The Grebe, *Podiceps affinis*, belongs to the order PYGODES, and to the family of PODICIPIDAE or Divers. It is a web-footed bird of about the size of a water hen, brownish on the upper surface, and pure snow-white underneath. The bill is compressed at the tip, smooth, straight, and pointed. It has short wings, and a short pointed tail, which it uses as a rudder. The backward position of their legs causes them to walk with difficulty, and obliges them to remain upright when out of the water. Most of them fly badly, and their short wings aid them in swimming, so that they may be compared to fins. It swims very swiftly and for a long distance under the water. Its food consists of fish, crustaceæ, molluscæ and such like. They are valued for their white silky plumage. During the last twenty years large quantities of skins of these birds have been sent to the European markets, where they are bought and manufactured into caps, muffs, pelisses, trimmings, etc. Sometimes they are found in inland waters. Their nests are generally placed among reeds, and rise and fall with the water. Its flesh is rank and nauseous.

The Sea-lion, *Otaria stelleri*, belongs to the Fin-footed Carnivorous Mammals, or CARNIVORA PINNIPEDIA, and are distinguished from all the other members of the Order by possessing small external ears, and by being able to bend their hind feet forward under their bodies and to use them for walking on land. *Otaria stelleri* belongs to the family of OTARIIDAE, which also includes the Northern

Fur-seal, *Callorhinus ursinus*, from the North Pacific. It is the skin of this last species which is the most valuable.

The principal characters of the family of seals are short limbs, which are so enveloped in skin as to be more like fins than legs. The neck is very short, so that the head appears united with the body, the nostrils are operculated, the animals possessing the power to open or close them at leisure. Their head in shape resembles that of a dog. Their body is elongated and uniform and their tail is very short. The teeth are those of a *Carnivore*, four or six incisors above, and two or four below, the canines pointed, and the molars 20, 22, or 24, all cutting or conical. In colour, except the common seal, *Phoca vitulina*, which is generally gray, and sometimes white, the other species are usually dark brown, appearing almost black when wet. The valuable dark fur of commerce is only the soft under-fur, all the long coarse hairs having been removed. The young and females produce the finest furs.

These animals are all aquatic, and pass most of their time in the water, and obtain their food in that element. It consists chiefly of fish, of which they can devour a large quantity at a time.

They attain a length of about six feet, sometimes more, especially the males, which are always much larger than the females.

Intermediate between the Eared and True Seals is the Walrus, or Morse, *Trichechus rosmarus*. It is remarkable for its one or two long canine teeth, or tusks, in the upper jaw, while the lower one has neither incisors or canines. These tusks are used for fighting, for climbing from the water on the ice, and for digging on the sea bottom for the molluscæ and crustaceæ, on which it feeds. It is a large animal from ten to twenty feet in length. It is rather a fearless animal, but harmless, unless attacked. Great numbers are killed for the sake of their tusks, the ivory of which is very valuable. The oil they yield is more valued than that of the whale, and the skin is made use of for carriage braces, wheel-ropes, etc.

The seals were known to the ancients from the remotest antiquity, and authors have made them the subjects of many legends. The names of *tritons*, *syrens*, *nereides*, *mermaids*, *etc.*, have all originated from these animals, and even now some fishermen are still imbued with superstitious ideas about them. They can be domesticated, and are very much attached to their masters, whom they obey with alacrity.

Many of them have been brought to Europe, and have contributed to the delight of the visitors to the Zoological Gardens, especially at feeding hours; but, unfortunately, they cannot live very long when taken away from their native countries.

They are always found on rocky shores of uninhabited coasts or islands, and may be seen creeping up on the rocks to feed their young and bask themselves in the sun. They never eat their food on land, but always in the water. They are splendid swimmers, and no fish can escape them.

In the arctic regions, in fine weather, they prefer the ice to the water, and vast herds of them are frequently found lying on the field-ice. Here is where these poor animals are attacked by the sealers and killed in vast numbers. They are polygamous animals, each male having three or four females. They generally have a layer of fat which affords a good deal of oil, with which the Esquimaux delect themselves. In fact this animal is of the utmost importance to these people, it gives them light, food, and clothing. They make bags with the skins of the larger species, which they sew well all around and distend with air. Half a dozen of these bags they lay upon rushes of straw, attach them with ropes, and make them into small rafts, upon which they embark for long voyages. Arranged in that way they never sink. The flesh is used by them as food, the fat is partly dressed for eating and partly consumed in their lamps, and the liver fried is considered by them as a very agreeable dish. The skin is dressed by a process peculiar to them, so as to be waterproof. With the hair off, it is used as coverings for their boats and as outer garments. So equipped they can invert themselves and their canoes in the water without getting their bodies wet.

As everyone knows, the seal fishery is of considerable importance to all the world, and more especially to Russia, England, and the United States, and lately special measures have been taken by these countries for the protection of these valuable animals. The actual value of a fine skin is about £20. After the silvery fox, which fetches as much as £80 per skin, it is the most valuable fur, and it is of the utmost importance to edict stringent rules for its preservation.

At 10 p.m., on the 15th of August, which was a Friday, and the day of the Assumption, we sighted the bay of San Francisco. Another twelve sails of distinct nationalities were also on their route for that port. In entering the mouth of the harbour which is rather narrow, we saw several wrecks,

and we were glad that the pilot did not try to get in the day before. It is a dangerous entrance, and especially so when foggy.

As soon as we had passed the mouth of the harbour, we enjoyed one of the most magnificent views to be seen. The bay of San Francisco has no rival in the world. It is about thirty miles long, and six miles wide, with several islands. All the vessels of the world could easily anchor there, and many more besides. It is perfectly safe, being sheltered by hills from all sides. Occasionally, in consequence of its large size, the strong winds are felt more or less in the bay, the waves are agitated, but there is no danger, excepting for small canoes.

At twelve, we anchored close to *Yerba Buena Island*, opposite San Francisco, but we could not land that day, the wind blowing too hard for small boats. More than 500 vessels were anchored in the port.

At last we had arrived at the end of our voyage, after 209 days of navigation.

On the 16th, after affectionate farewells between passengers, officers, and sailors, we embarked in the small boats with our luggage, and landed in the celebrated town of *San Francisco*.

CHAPTER IV.

CALIFORNIA.

San Francisco in 1851—Population—Frequent Fires—Summary Justice—Abundance of Rats—Commerce—Desertion of Sailors—Gold Placers—Exorbitant Prices of Certain Commodities—Gambling Hells in San Francisco—Free Fights—Murder of Successful Miners—Expeditions of Marquis de Pindray and Count Raousset Boulbon in Sonora—Death of Marquis de Pindray—Capture of Hermosillo—Death of Garnier—Battle of Guaymas—Execution of Raousset Boulbon—Magnanimity of General Yanez.

SAN FRANCISCO.

WHEN I landed in San Francisco, California had belonged to the United States for three years only, and a considerable change had taken place in that country, inhabited only by a few scattered missions during the domination of the Spaniards, San Francisco was at that time a city of 80,000 inhabitants, living in about 10,000 houses, nearly all of them built of wood. Hence the frequency of destructive fires. About three weeks before our arrival, one of them, the fiercest of all, had destroyed about one-third of the buildings, and workmen were seen everywhere building new ones. Shortly after our arrival all of them were rebuilt. Cases of goods were to be seen everywhere in the streets, also pieces of furniture, in fact everything bulky, and with all that robberies were very scarce. It is true that justice was very prompt and effectual. Once I assisted at the catching of a thief, and in less than an hour he was condemned and hanged from the balcony of the house where the theft was committed. This summary justice was executed by a few citizens who had united together and formed a Committee of Public Safety.

I remained in San Francisco from the 15th of August, 1851, to the end of August, 1852, and during that time I saw many fires; but the burning of twenty to thirty houses was considered as of no consequence. From August to the end of December I lived at the small bay, about one mile and a half

from the town. The rent of the house was sixty dollars monthly, equivalent to £12. It was a place considered to be more secure and more healthy than the town, and it was inhabited by many merchants.

It was a pleasant walk from the bay to San Francisco, but at night, the roads were invaded by a prodigious quantity of fearless rats, and it was nearly impossible to walk without treading upon some of them. I believe they were the common European rat (*Mus decumanus*), imported by ships; but here it is about three or four times larger. Besides these animals, the streets and roads were always encumbered with all sorts of clothes, pants, shirts, etc. The reason of this was that it was cheaper to buy these articles of apparel new, than to have them washed. The usual prices of washing were four shillings for a shirt, and sixpence for a handkerchief, and so on in proportion. In consequence of large arrivals of goods of that description, you could buy them new, cheaper than the cost of washing.

Life at home was not very expensive, if you chose to live on fishes, game, beef, vegetables, and fruits, but other commodities, as fresh eggs and chickens fetched extraordinary prices, such as two shillings for an egg, and £1 for a chicken. In dry goods, wines, and conserves, there was a great fluctuation in prices, varying one hundred per cent. or more in the week. Sometimes you could buy them cheaper than in the European ports, and at other times you had to pay very high prices for them. All depended upon the arrival of ships carrying the same provisions, so that the market was often overstocked with some sorts of goods, meanwhile others were scarcely to be had at any price. During my stay, I have seen good claret and other wines sold as low as tenpence per bottle, and at another time, at four shillings a bottle, and so on with all sorts of goods. Paper for the printing of journals cost occasionally as much as one shilling per sheet. Several sorts of fruit and vegetables also fetched good prices. But, as I said before, if you contented yourself with buying what was abundant in the market, you could live tolerably well and cheaply. Salmon of superior quality and many other good fishes, elks, and even bears, were common enough, and cheap at times. Eggs of Guillemots were always excessively abundant during the season, and could be had at two shillings per dozen. Although very different in taste to hens' eggs, they are very palatable and much larger. I have eaten them prepared in all manners, hard boiled, fried, in omelettes, and

otherwise ; but found them best made into omelettes. They keep good for a long time, so you can have some nearly all the year round.

The population of San Francisco was very changeable in consequence of the new arrivals. Every day, ships of all nationalities arrived in San Francisco bringing passengers. Few remained in town, the majority of them were bound for the *gold placers*, which were all the rage at the time. There was such a run for them, that very often all the sailors deserted their ships, and it was impossible to find new hands, so the ships had to remain in San Francisco for several months. Nearly all the passengers of our ship did like the others, but I am sorry to say that very few of them did well. One of them, Mr. Garnier, a non-commissioned officer who had been through the African campaigns, and whom I saw several months after my arrival in California, was partly successful, and showed me some fine specimens of gold nuggets ; but he said that it was very hard work, scarcely worth the trouble. It is a fact that very few of the diggers return with a fortune, a great many of them dying in the placers. Many others who are successful only come back to San Francisco to spend their money in all sorts of ways, and more especially in the magnificent gambling saloons which are abundant in the town, and where they leave the whole, or the better part of their gold.

Many of these houses were flourishing at that time, and they offered all sorts of attractions to allure the miners ; drink, women, concerts, etc. With good reason they were called **GAMBLING HELLS**. Scarcely a day passed without murders being committed in these infernal abodes, the place of resort of all that was bad. Pistols were taken out from their cases, and shots freely fired for nothing at all, and unfortunately sometimes missed their aim, and inoffensive lookers-on were murdered. The body was carried away immediately, and left in the street, and five minutes after the gambling was resumed as if nothing had happened. Occasionally, there was a free fight, everybody shooting one another, until several were killed or wounded.

Another enemy of the miners was the decoying shark, who waited for them on the quays, and after making friends, as compatriots or something else, drugged and murdered them. So that after all, with few exceptions, the only ones which I heard of having made a fortune in the placers were the hotel and bar keepers, and others of the same category, who established themselves at the diggings, exchanging their

commodities for gold dust or nuggets ; but even these were liable to be murdered by the suspicious and lazy characters which always abound in such places.

Add to that, the insalubrity of the country where the placers are, especially the intermittent fever reigning during the rainy season, the exorbitant prices paid for everything, such as one dollar for a fresh egg, or for a glass of brandy, and everyone will be convinced that the profession of miner in California, in the year 1851, was not such a Paradise as many thought.

About the time when Garnier came back from the placers, there were two French celebrities residing in San Francisco, where I had the opportunity of seeing them. One was the *Marquis de Pindray*, the other *Count Raousset de Boulbon*. The last one was young, active, and ambitious. He was of a good French family. Young and rich, but eager of emotions, he engaged as a volunteer in the African army in which he served as attaché to the Duke d'Aumale. Later on, being nearly ruined, he went to California with the hope of remaking his fortune ; but when I saw him he was far from it. In fact, he had to work at everything to make a living. For a time he subsisted by hunting elks and bears ; but naturally no fortune could be made that way. At that time rumours circulated in San Francisco that very rich gold placers had been found in the Sonora. The Marquis de Pindray and Count Raousset Boulbon were very anxious to go there with a number of followers. Meetings were called to that effect, and Count Raousset, who was a good talker, convinced many of the unfortunate and unsuccessful miners who were in town at that time, to accompany them. Garnier, who had known Count Raousset in Africa, was one of the first to enlist as an officer. About two hundred, chiefly French, were willing to go with them. Shortly after, they embarked and sailed for Guaymas. I do not know exactly what happened there between Count Raousset and the Marquis de Pindray, but there must have been some misunderstanding between them, as they separated. The Marquis de Pindray went with his followers in the Alta Sonora, and Count Raousset, accompanied by Garnier went to Mexico, and soon after returned to San Francisco.

Some days after his return, he convoked several meetings asking 200 followers to go with him, to work the gold mines of the Upper Sonora. Six hundred replied to his call. On the 1st of June, 1852, they arrived at Guaymas. His troop

was militarily organized. Garnier was his first lieutenant. The population of Guaymas made them quite welcome, but not so the authorities, who were not reassured at seeing so many strangers well armed, and having two pieces of field artillery with them.

Governor-General Blanco, who resided at *Hermosillo*, close to Guaymas, was not pleased with their arrival, and tried all that he could to oppose their march into the interior, but ultimately permission was accorded to them to go to the mines; but they were scarcely gone when General Blanco regretted his former decision, and sent an order to Count Raousset to come back and confer with him.

Things had reached the point wished for by Count Raousset. Although he went away, exasperated by the tardiness of attention given to his solicitations by the Mexican General, the losses which these delays caused to the Company, and the contrarieties of which his troop were the victims—in his own mind he was glad of it—all these annoyances giving him a show of reason for the aggression which he meditated, and the spirit of his soldiers, cleverly managed by him and the officers who were in his confidence, was so exalted already, that Count Raousset in taking the offensive seemed to obey the general suffrage.

He refused to go to the conference proposed by General Blanco, to whom he sent one of his officers, Garnier, who came back with the following propositions made by the General.

The French could continue their route on the condition of losing their nationality and becoming Mexican soldiers, with Count Raousset as their captain, or reducing their number to fifty, or lastly, waiting until their security cards had come from Mexico.

The last of these conditions was the only one acceptable, but as they had already lost over two months in parleys and would probably have to lose as much more until the arrival of the cards, there was unanimity in the camp to reject the ultimatum of General Blanco.

In the meanwhile, forty men of the French Colony, *Coscopera*, founded a few months before, in the Upper Sonora, by Marquis de Pindray, who died soon after, and whose death brought about desertion amongst the colonists, under the leadership of Mr. de la Chapelle, joined the volunteers of Count Raousset.

The latter, who thought that he had a sufficient force for

the success of his plans, took the war-path, and visited all the villages in the neighbourhoods, inviting the inhabitants to declare their independence from Mexico. Several influential Mexicans made appointments with Count Raousset, offering their co-operation, with the result that several villages took part in his favour.

But money was scarce, the soldiers were destitute of clothes and shoes, the armament alone was complete. In consequence of his contests with the Mexican General, he could not discount a draft of 10,000 dollars, even for 6,000. Pressed by necessity, he seized a convoy of thirteen mules loaded with victuals for the soldiers of General Blanco. War was declared. His soldiers thought they defended a good cause and were full of spirit. The Sonorienses admiring their intrepidity proclaimed them *heroes*. Raousset gave them a French standard with this inscription, "*Independence of Sonora.*" The French had only 184 infantry soldiers, 50 horsemen, 25 artillery men, and 4 field pieces. With this small force, they attacked an enemy four times more numerous, and entrenched behind walls.

On the 14th of October, they were close to *Hermosillo*, when a deputation of merchants came to the camp and offered to Raousset the sum of 60,000 dollars if they consented to abandon the attack of the town. This offer was refused, and immediately after they entered the town, but scarcely had they passed the first houses of the suburbs when they were fired upon from an isolated house. They deployed as skirmishers, surrounded the house, and took it by assault.

In the public garden, 500 National Guards detained them for a quarter of an hour; the impetuosity of the two first sections well maintained their fire until the artillery took part in the action and obliged the National Guards to evacuate the place. The fight continued street by street, ending in the complete defeat of the troops of General Blanco, who had to retreat in the direction of Guaymas. During this action, two casualties worth recording, took place. The first was that of a volunteer named Hill who came to close quarters with General Blanco. He shot at him, but missed; he then ran upon him, bayonet in hand, but before reaching him, he was made a prisoner and shot on the spot. The other casualty was that of poor Garnier, a brave fellow, who secured a small howitzer, at the cost of his life.

In half an hour Raousset conquered the town, at the cost of seventeen killed, and twenty-three wounded, seven of which died several days after.

Although complete order reigned after the action, the inhabitants fled in all directions, carrying their valuables with them. The volunteers only laughed at them, and although the men composing their troop contained many of the worst characters, without clothes or money, they were satisfied with the glory of triumph, and no excesses were committed. Mr. de Raousset thought that the influential merchants, who had promised their co-operation, would hasten to meet him, but in that he was deceived. No one appeared, and all his hopes of conquest vanished. He sent several of his officers to the State Governor, Mr. Gandara, offering him all sorts of things if he supported him, but the only reply sent was to evacuate the town, and to submit to the laws of the country. Now his soldiers began to complain of his inactivity, and he was taken very ill. Seeing that his position was getting worse every day, he gave the order to retreat on Guaymas.

They left *Hermosillo* twelve days after the capture of that town. Their retreat was only opposed by a few bands of peasants who were afraid to approach, firing upon them from such a distance that no casualties occurred. They stopped at nine miles from Guaymas, and decided to enter that city on the morning. But the same night, some emissaries of General Blanco were sent to Raousset, inviting him to come and see him. This he did, escorted by Blanco's soldiers, and was received in Guaymas with all the honours accorded to a Chief Commandant.

However, his illness did not permit him to negotiate with Blanco as soon as convenient, and his volunteers, anxious to learn their fate, sent two of their officers to negotiate directly with General Blanco, if Raousset was not able to do so. Not hearing from these officers, the troops deputed a sailor and another illiterate volunteer to negotiate directly with Blanco. These delegates first went to Raousset, who refused to receive them. Offended at this, and proud of their mission, they went to Blanco, who received them well, and passed a treaty with them, by which they acknowledged in the name of all that they had been deluded and abandoned by their chief, and agreed to leave the country, and deliver to the General their arms, amunitions, cannons, etc., provided that a sum of 11,000 dollars should be paid to them. In fact it was a sale of their armaments, enabling them to return to California. These conditions were executed on both sides, and so ended the first part of what is known as the Guaymas drama.

Recovered from his illness, Count Raousset, to whom life and liberty had been granted by General Blanco, returned to San Francisco. Unfortunately for him, instead of desisting from his projects, which were scarcely reliable, and profiting by the experience acquired in his former venture, he convoked what remained of his old confidants, and told them that he was determined to pursue his projects on Sonora. He opened some offices for enlistments; but this time he asked not less than 1,200 to 1,500 men. The renown of his exploits in *Hermosillo* had acquired him many sympathisers, his brilliant combinations and his eloquence seduced a rich banker of San Francisco, who put his fortune at his disposition. At the same epoch he received a letter from Mr. Levasseur, French Minister at Mexico, inviting him to come to that capital to confer with *Santa Anna*. Raousset asked for a safe-conduct, which was forthwith sent to him. He went to Mexico, had several interviews with the President, but the offers made to him did not satisfy his ambition. After a sojourn of four months in Mexico, tired of conferences without issue, he suddenly departed.

Having returned to San Francisco, he tried to renew the affair with the banker; but the latter, who had had time to reconsider the scheme and its probable success, retired from it altogether. Raousset was sorry to have left San Francisco four months before, and said that his calling to Mexico, by *Santa Anna*, had been made with the sole object to miscarry his projects.

Count Raousset made an appeal to all those who wished to enrich themselves quickly. "*Arm yourselves and go to Guaymas, and I will join and guide you in the Sonora, I will make you landlords of large properties, and you will become the nobility of the Mexican Province.*" This brilliant perspective fascinated many, and they volunteered to go with him. Already the *Challenge*, a small brig, was ready, and the armament was prepared slowly, and at night, to evade the watch of the American police. At the same time the Mexican Consul in San Francisco, Mr. del Valle, received instructions from his Government to send to Sonora the same men that Raousset had engaged, offering, after one year of military service, to distribute to them portions of land corresponding in size, to the rank that each one should occupy in the army, that those who had had high grades in their country should enjoy a corresponding grade in the colony, and lastly that the immigrants would not lose their nationality.

On learning that the Consul, Mr. del Valle asked for 1,000 immigrants, Count Raousset rejoiced, thinking that the Mexican Government would soon tire of supplying the necessary funds for the maintenance of so many immigrants, and the dissatisfaction produced amongst these men would facilitate the success of his projects. But things did not take the course he thought. Mr. del Valle sent only 300 immigrants of all nationalities; although the French were still in the majority. Count Raousset not considering this number as sufficient and not being able to depend upon all of them, relinquished for a short time his projects against the Sonora, but a casual circumstance compelled him to leave San Francisco.

An American colonel of the name of Walker, had also attempted the conquest of Sonora and Lower California, but beaten by the Californians, he had been obliged to return to the United States and to appear before the authorities of his country. His deposition incriminated Count Raousset as an accomplice of the Colonel, engaged to act in accord with him. Warned in time, Raousset fled to escape arrest, and perhaps condemnation.

At that time, many of his former followers who had gone to Sonora, trusting in the promise he made that he should meet them there, wrote to him to come. He bought a schooner and left San Francisco at night. The 1st of July he arrived in Guaymas.

On landing, he learned that the new Governor was a good and generous man, who had won the affection of the French, and that his influence with them was such, that for a moment he was disconcerted, but he quickly rallied, and went directly to see the Governor, Mr. Yanez, and told him that he had come to avenge himself on the Mexicans; but that he had been so noble in his conduct respecting his compatriots, that he renounced his designs, and offered him his sword and services. Governor Yanez, well aware of the services that such a man could render to his country, if it was possible to gain him over, praised him for his good resolve, and told him that he was going to ask instructions from his Government. The volunteers of the foreign regiment, who did not know the character of the new comer who posed himself as their chief, distrusted him at first, but soon rallied entirely round him, convinced that he desired peace, which gave them all that which the conquest could procure, but a minority, composed of bad characters, ambitious, and illiterate, were hostile to Yanez and so arrogant towards the Mexicans, that

the last, in a moment of exasperation, fired several shots at them.

Immediately after, the French assembled; they had smelt powder, and they claimed vengeance. This incident was the cause of the events of the 13th of July.

From that time, the two chiefs knew that the projected alliance was impossible, the spirits of the men were too much irritated against one another. However negotiations took place. Mr. de Raousset acting in the name of all, wrote to General Yanez, complaining of the aggression made the day before, and asking for the safety of the men whom he commanded, that the General should deliver to him two cannons, and that the National Guard should be disarmed. Yanez, who was expecting reinforcements from Hermosillo, lengthened the negotiations as much as he could, and although he acquiesced to the demand of cannons, he refused to disarm the National Guard. Notwithstanding the irritation of the men's spirit, he replied to the daring visit of Count Raousset by another more audacious. He went alone to the French quarters, informing them beforehand of his projected visit. They decided to keep him as a prisoner. In so doing, Guaymas was bound to fall into their hands without fighting.

Arrived at the French quarters, Yanez gave orders to the troops to form themselves into a square. He reminded them of all the kindness he had bestowed upon them, and implored them to give up their rebellion, and to abstain from shedding blood, and that he should treat them in the future as he had done in the past. He told them that they had been treated by him as his children, that they were ungrateful, that God would know how to punish them, and so forth. His speech was delivered with such spirit and tenderness that it overcame the ill-feeling of the men, who replied with hurrahs. Yanez making a good use of the enthusiasm which his speech had produced, ordered Captain Desmarais to open the files, and he went away free, to the great astonishment of Raousset and his followers.

It has been affirmed that the subsequent victory he gained over the French, was partly due to that bold deed. From that time discord prevailed among them, some inclining for peace, others for an immediate declaration of war. A commission was appointed to confer with the Governor.

The conference took place on the 13th of July. Yanez was well willing on many points, except that of the disarming of the National Guard. The delegates, in favour of war,

made a very poor appearance before Yanez ; they hastily concluded the conference, and gave a wrong account of what had taken place between them and the General. Count Raousset was undecided what to do when the sudden query from one of his followers, "YOU ARE NOT WHAT YOU WERE?" made him start, and rising his head he only said, EN AVANT.

Yanez with 300 men shut himself up in the barracks. The National Guard occupied the neighbouring houses and four cannons were placed in such a way that they could fire effectually on all sides. To the watchword of Raousset, many volunteers at first refused to march, but they were won over, took their arms and followed him, many against their will. The advance was made in three different directions. Raousset at the head of the two first companies marched in the principal street, and went straight to the cannons, but the firing of two case shots caused great havoc among his men. None the less, with thirty men, they slowly advanced, and disabled all the artillerymen ; the least assistance would have secured the victory. But the two other columns had not executed their plan of attack, besides which Yanez was there, and being short of men, he loaded one of the guns himself, fired it, and left only ten valid men to Raousset, who tried to escalate the barracks, but his efforts were useless. He sought for death but found it not.

At the same time the dispersed French thought less of fighting than to beg for mercy ; downcast and repentant, they took refuge in the house of the French Vice-Consul, imploring his protection. Raousset left almost alone, returned to the sea shore with the hope of finding his schooner there, but those who had charge of it were gone.

He went to the house of the Vice-Consul, tried to persuade his men to renew the fighting, did not succeed, gave up his sword, and waited. Yanez came out with his men and attacked the Sonora Hotel, still occupied by the French. They forced an entrance, and the slaughter began. Every one of them would have perished if the Vice-Consul, Mr. Calvo, an influential man, had not interfered in their favour. They were all made prisoners. Pistols were left to Raousset with the hope that he would kill himself, but he did not do so, and from that moment the intrepid adventurer became a mild and peaceful Christian. He felt what he owed to his name and to himself, and disdaining to defend his own life, he only thought of his honour, and declared that all his acts were

political, having no other aim than the civilization of the people and the welfare of humanity. He was sentenced to be shot. From that moment he was very quiet, and the Mexican priest was very much surprised to find in him an eloquent Christian, speaking of religion with the profound respect that only true faith imparts. He came to comfort him, but the words expired on his lips, dominated by a great emotion. It was Mr. de Raousset who comforted the priest. He spoke of the vanities of the earth with the accent of the soul, free from delusion, and when speaking of the other world, he did so in such brilliant expressions of hope, blessedness, and divine misericord, that the good ecclesiastic listened to him in estacy, and after the last kiss, he went out from the chapel, exclaiming, "*This man is a Saint.*"

Mr. de Raousset went to the place of execution without showing any emotion. On the way he took his hat to protect his head from the sun, and when he arrived at the fatal spot, he indicated his heart to the soldiers, and placing his hands behind him he looked upwards and fell

The noble character of General Yanez appeared again after the battle of the 13th of July. It was due to his magnanimity that the lives of all the prisoners were safe. Yanez followed the impulse of his heart to the cost of his interests. He was relieved of his functions, and brought up for trial by Santa Anna in consequence of his generosity. Part of the rebels were sent to Mexico, and from there directed to Vera-Cruz and embarked for France. The name of Yanez will always be recorded by them as one of the best of men. Before leaving Mexico, officers and soldiers sent him farewell letters, in which they expressed their most eager feelings of gratitude for his admirable conduct towards them.

The idea of Count Raousset Boulbon was to conquer the Upper Sonora, to declare its independence, and place himself at the head of the Government of that Republic.

For a while, it seemed as if this audacious plan of his would succeed and probably it would have come to that, if money had been coming in, and if the population had helped him; but unfortunately for him, it did not, hence the drama!

It is a great pity that such an active and able bodied man, did not content himself with being a subordinate of the Mexican Government. I have no doubt, that if he had accepted a command from the Mexicans he could have achieved great renown in the war against the wild and ferocious Indians of Sonora.

CHAPTER V.

CALIFORNIA.

Principal Buildings of San Francisco—Iron House—Chinese Consulate—Immigration of Chinese—Derbec—Collecting Objects of Natural History—Humming-Birds—Remarkable Animals peculiar to California—The Californian Vulture—Elks—Bears—Californian Salmon—Insects peculiar to California—Giant Trees—Climate—Aspect of the Country.

SAN FRANCISCO.

PRINCIPAL BUILDINGS.

THE principal buildings which existed in San Francisco in 1851, were the Town Hall, the ancient theatre, a large and fine building, the frontage being of white marble. The Government had just bought it for the sum of 500,000 dollars. The Custom House, which was not quite finished, a very large brick building, erected at a cost of 300,000 dollars, two play-houses, the Jenny Lind, and another in which French companies were usually playing, many music halls, and a large number of gambling houses, some of which were sumptuously furnished, the California Exchange, several banks, one of which was entirely constructed of iron sheets, sent from New York. A heavy rent was charged in that bank for the keeping of valuables, documents, and the like, and I have no doubt that it paid well; fifteen Catholic and Protestant churches, several colleges and schools, hotels, nearly all of which were built of wood, a private Museum, containing a fine collection of minerals, chiefly specimens of auriferous quartz, gold nuggets, and gold dust. There was also a collection of Californian birds and mammals, especially rich in Anatidae, or Ducks. Specimens of cereals, vegetables and fruits were also exhibited, and I was much impressed with the beauty and size of some of them. I saw there a specimen of potatoe weighing fifteen pounds. The entrance fee was one dollar. In consequence of the frequent fires, they were beginning to build

houses of bricks and mortar. During my stay in San Francisco, about two hundred of them were built. But the principal curiosity amongst the useful and important buildings was the great Wharf, at the end of Montgomery Street. It was the widest and longest of all, over one mile in length, and they were still adding to it. I think it was the longest wharf known. Hundreds of ships were constantly waiting their turn to discharge their cargoes or take in fresh ones, although a great many of them were obliged to sail without any return freight, as the commerce of exportation was nearly nil at that time. The said wharf was built on the sea for the most part, and they were gradually filling the sea with the detritus of the town. Very often I went fishing from that wharf, and I caught large quantities of fish belonging to many different species.

At the end of December, I removed from the small bay to another part of the town, at the top of Stockton Street, close to the Chinese Consulate. There were only two other houses in that part of the suburbs. In fact we were quite in the country. The small Villa, built entirely of wood, was divided into three fine rooms on the ground floor, and a very large room above. The cost was twenty-five dollars monthly. There was a front and a back garden. I remained in this house eight months. The Chinese Consulate, which was also a museum and a bond house, where the goods of many Chinese merchants were kept, being near, I went there very often, and made friends with the inmates. I received many Chinese curiosities from them in exchange for fish which I usually caught from the great Wharf. I remember particularly a species of *Siluridae*, or Cat-fish, which I caught abundantly. I did not care for them, so I always gave them away to my friends of the Consulate, who were very fond of that fish. On these occasions they took me in their store-rooms, which were crowded with all sorts of goods—umbrellas, fans, pipes, beautifully lacquered chests of all sizes, straw hats, crackers, idols, etc., etc. In fact, to me it was like a museum of Chinese curiosities, and I found great pleasure in looking at all these pretty things, and they always gave me something, so that little by little I made a small collection of them, some of which are still in my possession.

Chinese immigrants were very numerous at that time, and they had already their own district, the centre of which is Sacramento Street, occupied with hotels, boarding houses, opium dens, gambling houses, shops, playhouses, temples,

etc. It was a most interesting sight for an European, although I must confess that their district was the most crowded and dirty. Chinese women were scarcely to be seen, and the very few residing in San Francisco were exhibited as great curiosities. Not so with the men, of whom there were about ten thousand, all of them finding occupation soon after their arrival. Servants were so scarce, and so dear at that time, that there were no end of applications to the Consulate for Chinese servants and cooks, and I really believe that they contributed in some way to the rapid prosperity of San Francisco.

From the intercourse that I had with them, I consider this Asiatic race very enterprising, willing, easily contented, patient, good workers, and even affectionate to those who treat them well. In all these respects they resemble extraordinarily the American Indians. Anyone who has studied the two races cannot believe otherwise that they belong to the same race of men, the only differences existing between the two being the result of a long separation and I should not be much surprised if one of these days a good linguist will find analogies between their languages. In 1851 and 1852, the Chinese were welcomed to San Francisco, because, as I said before, servants, male or female, were not to be had easily, and the price of all the indispensable necessities of life was excessive. As soon as the Chinese arrived in numbers, an immediate change took place. The price of servants dropped from 50 to 75 per cent, and became accessible to many; the same with the washing, which the Chinese understood and did well. They were employed for all purposes, and usually gave general satisfaction. Those who were not employed as servants, established themselves as merchants or traders. In their special district all kinds of merchandize were offered for sale. Close to the merchants of dry-goods were barbers, laundries, coffee houses, bathing establishments, restaurants, opium houses, and even a theatre was built by them. Many made a living that way, others went to the gold placers, and as a rule were more successful than the Europeans, because they contented themselves with less, were more patient, more tenacious in their purpose, and more moderate in their wants. They did not drink, they ate sparingly, and at a small cost, and they gambled only between themselves. Their compatriots who had also gone to the placers and established themselves there as hotel keepers, charged them

moderate prices for their food and lodgings. Hence their better success, even at the placers.

It was a well-known fact that many of them had successfully worked diggings abandoned by European miners. But there was a dark side, that of the hatred which the Europeans had against them, and in these out-of-the-way places it was considered of very little consequence to murder a Chinaman for nothing at all, or to rob him of his gold. Nevertheless, many were lucky, either as miners or merchants, and traders, and returned to their country with sums of money which were considered fortunes there.

This excited the covetousness of their countrymen to a high degree. Hence the constant departure of new immigrants from China to California.

In this they were helped by their countrymen residing in San Francisco, who advanced them money for the payment of the passage. For the very low sum of five to ten dollars they were transported from China to San Francisco. The ships on which they embarked were literally crowded with human lives, and for months they were scarcely able to move about; but nothing intimidated them. Many died during the passage, but it made no difference to them, although the wish of a Chinaman is to be buried in his own country.

This Chinese custom gave the idea to enterprising Americans to start agencies for the transport of corpses from California to China, and many were the ships which were freighted exclusively for that purpose.

I witnessed several Chinese burials, the Chinese cemetery being on the road from San Francisco to the Mission of Dolores, not far from my house. During the whole distance from the house of the dead to the cemetery they fired crackers, burned odoriferous papers, and usually the mourners were numerous.

About that time I made the acquaintance of Mr. Derbec, a clever man, who, after trying his luck with the placers like so many others, came back to San Francisco and started the newspaper *l'Echo du Pacifique*. He was the proprietor and the editor of that journal, one of the best French newspapers ever published in San Francisco. He was a learned and modest man, and of agreeable society. We were good friends, and when I left San Francisco I regretted parting from him much. He was then publishing his journal and doing fairly well. It was from him that I learned that paper became so scarce for a few days that one shilling per

sheet had to be paid, and I remember that many times he had to print his newspaper on all sorts of coloured papers, light brown, blue, or any other light colour.

From March to August, I collected specimens of Natural History. Many were the species of beetles and butterflies that I collected in the suburbs of San Francisco. During my rambles I very often met another Frenchman, the well-known collector Lorquin, who was chiefly searching for insects. Lorquin was an enthusiastic collector, who had already done good work in Philippines, Célèbes, and New Guinea. I also collected many species of birds, and more particularly Humming-birds. Two species were abundant, *Calypte annae* and *Selasphorus rufus*. I found many nests of these two species during the months of March and April, and at one time I had as many as sixty of them alive, all taken from the nests. I fed them with fresh flowers and small insects. Some of them lived four months. At first I had them all together in a large cage made on purpose, but as soon as they were grown up, they began to fight so much that I was obliged to put them in separate cages. I put one pair in each, and I succeeded in keeping them alive and well for a long time. My intention was to send them alive to Europe, but even the most robust died at sea, and it was a complete failure.

Nevertheless, I think if the same experiment was repeated in Florida, New Orleans, or New York, with *Trochilus colubris*, there are many probabilities that they would arrive alive in Europe; but, of course, they could not live long there. Since 1852, I think one experiment of that sort has been made with the Columbian species, and many of them arrived safely in Paris; but they died soon after their arrival. There is more chance with the northern species.

Calypte annae, and *Selasphorus rufus* are two very fine species. *C. annae* has the head and throat of the most beautiful metallic crimson; the upper surface is golden-green, the breast and abdomen gray, and the flanks washed with green. *Selasphorus rufus* has the upper surface bronzy-green, the throat metallic coppery red, very brilliant, and the undersurface white. They have the same habits as the other species. They breed in California. I think that *Calypte annae* is a species peculiar to California and the surrounding countries; but not so with *Selasphorus rufus*, or the Flame bearer. The latter migrates as far south as the State of Oaxaca, (Mexico), where I collected many specimens. They are also found abundantly in the Rocky Mountains and

Colorado; but the bulk of them go to Mexico. In Mexico, the capital, they are very abundant in the months of July and August, and they arrive in South Mexico at the end of October, at which time there is an abundance of flowers in the mountains. They are found at high altitudes and it is probable that they follow the slopes of the Cordilleras, as I have never seen the bird in the valley of Oaxaca, or in any other valley, excepting the table lands of Mexico, which altitude is about 7,500 feet above the level of the sea.

My friend, *Léon Laglaize*, grandson of Lorquin, also well known as a successful collector in West Africa, Philippines, and New Guinea, has witnessed the departure of these birds from California to Mexico (?) He told me that one day in August, when collecting insects in the neighbourhood of San Francisco, he saw thousands of these birds assemble on a large oak tree and depart together in a southerly direction. This being the period of their migration, it is very possible that he witnessed that rare and extraordinary sight. My favourite excursions were from San Francisco to the Mission of Dolores, a hilly country, destitute of forests and rivers. There was not much vegetation, only shrubs and small trees scattered amongst small plants, the soil being rocky and particularly favourable to insects, especially *Carabidæ*, *Tenebrionidæ*, and *Curculionidæ*, and to rabbits and partridges. Of the last, *Ortyx californicus* was very abundant.

The climate of San Francisco is mild and healthy, but northerners are very frequent. The rainy season lasts from December to March, and during these months some of the streets were sometimes impassable. On the other side of the bay, where I made several excursions, the aspect of the country is more picturesque. Many rivers have their outlets into the bay, and forests of pine and oak trees are conspicuous.

Animal life is abundant on both water and land. Many species of Geese and Ducks are extremely abundant. I collected twenty different species: *Anser hutchinsi*, *Chen hyperboreus*, *Aix sponsa*, *Mareca americana*, *Dafila acuta*, *Querquedula carolinensis*, *Chaulelasmus strepera*, *Spatula clypeata*, *Aythya wallisneria*, *Bucephala americana albeola* and *histrionica*, *Oidemia americana*, *perspicillata*, and *deglandei*, *Querquedula discors*, and *cyanoptera*, *Mergus æthiops* and *serrator* and *Lophodytes cucullatus*. Pelicans were also abundant. On land, *Lophortyx californicus*, and *gambeli* and *Oreortyx picta* were also plentiful. Of the first, *L. californicus*, large quantities are brought to the markets,

and sell at a moderate price. It is a pretty bird, and easily domesticated. There are also a large quantity of songsters, finches, sparrows, etc.

Among the RAPTORES, *Aquila chrysaetos*, *Buteo borealis*, *lineatus* and *swainsoni*, *Cathartes aura*, *Falco peregrinus*, *Tinnunculus sparverius*, *Strix pratincola*, *Bubo subarcticus*, *Speotyto cunicularia*, and many others were occasionally found; but the rarest of all, the Californian Vulture, *Pseudogryphus californicus*, was seldom seen. It is a very rare bird, peculiar to California. It is the largest of the North American species, rivalling the Condor. It is dark brown, with the head and neck naked. It is very voracious, and when many are together the carcass of a horse or cow is devoured in a very short space of time. The smaller species, *Cathartes aura*, does not dare to approach them. It is not uncommon to see them assemble with the gulls, and greedily devour the carcass of a whale which has been cast ashore, and they will even pursue weak and wounded game. Among Mammals, squirrels and rabbits were the most abundant, but occasionally deer or bears were seen. The Wapiti deer, *Cervus canadensis* (?), could be bought in the market nearly every day. It is a large animal measuring four to five feet at the shoulders. It is red-brown, the tail is short, and the horns are round and erect, branching in serpentine curves, measuring six feet and weighing about thirty pounds. They live in small families of six or seven individuals, inhabiting clumps of woods, and feeding upon grass and young shoots of trees. The flesh is coarse; but if left for a few days to mature good roasts can be made with it.

The bears are not so common, but nevertheless many were sent to the market, and the meat fetched a good price. A bear-steak was considered a great delicacy by connoisseurs. Occasionally a grizzly bear, *Ursus ferox*, was also to be seen. It is a large species measuring nine feet in length, and weighing sometimes 800 pounds. It is the most ferocious species of bear, very powerful, and extremely dangerous to approach when wounded. It feeds sometimes upon fruits and roots, but at others it preys upon animals. The bison is said to be no match for this ferocious animal. After killing it, it will drag the carcass to some retired place where it digs a pit for its reception, and returns to feed upon it till the supply is exhausted. Probably, like the other species of *Ursidae*, they lay in caves during the winter, which they pass in a dormant state, and without food.

Many are the tales of narrow escapes of hunters from falling a prey to these ferocious animals.

Fishes are also very abundant in California, but the most valuable is the Californian Salmon, which is now acclimatized in many European rivers. A good friend of mine, the late Professor Baird, of the Smithsonian Institution, Washington, sent fecundated ovæ of that and other species to all the European Aquariums.

Like all the other species of salmon, they grow to a large size, weighing sometimes forty pounds. In entering the mouth of the rivers in order to spawn, the females are always observed to precede the males, depositing their ova in little holes or nests, which they form in the sand, at the bottom, for the males to fecundate. The young grow very rapidly. When first hatched they are about an inch in length, and during the first year are called *parr*. When they remove to the sea they assume a more brilliant dress, and then become the *smelt*, varying from four to six inches in length. After a residence in the sea, from two months to ten weeks, they revisit the fresh waters, and weigh then from two-and-a-half to four pounds, and are called *grilses*. During the ensuing winter they spawn, and are then known as *salmon*.

Many species are found both in Europe and America. Trout and Char, of which many species are known, belong to this family. Some are migratory, others are not. It is one of the most valuable fish. Many valuable fisheries exist in Europe and America. The Scotch fisheries are the most important, giving employment to many thousands of people.

Among the Californian Insects the most remarkable forms are those of the Tiger beetles, or *Cicindelidae*, which are represented by various species of *Omus*, peculiar to California. Several species are known, *Omus californicus*, *dejeani*, *audouini*, and others. Among the Carnivorous beetles, or *Carabidae*, several genera are peculiar to California: *Opisthus richardsoni*, *Metrius contractus*, *Callisthenes discors*, *breviusculum*, *reticulatum*, and others; but the European genera *Carabus*, *Calosoma*, and *Cychrus*, are also well represented. Of the last many fine species, are peculiar to California, *Cychrus interruptus*, *ventricosus*, *alternatus*, and *punctatus*, are abundant. Another species, the smallest of all, *Cychrus mimus*, is still a rare species. In the *Staphylinidae*, *Thinopinus pictus* is a very curious species, peculiar to the country.

Among the Lamellicorns, or *Scarabaeidae*, many curious

species of *Lachnosterna* are abundant. *Macranoxia*, a genus peculiar to California and Mexico, is represented by one species, *M. crenita*, but the rarest are *Pleocoma*, a genus peculiar to California, and still very rare, and *Megasomatherites*, the smallest species of that genus. The *Tenebrionidae* are represented by many species of *Eleodes*, a genus peculiar to California and Mexico. The *Curculionidae*, or Weaver beetles, are represented by many small and obscure species belonging to interesting genera. Among the *Cerambycidae*, or Longicorns, I found several species of *Prionus*, a genus found also in Europe, and many small species of *Acmaeops*, *Leptura*, *Tetraopes*, *Monilema*, and others, but the rarest was a species of ROSALIA, *R. funebris*, of which genus one species, *R. alpina*, is found in Europe. Of *Chrysomelidae* there was a large number of species, usually abundant on shrubs and leguminous plants.

Minerals I shall not mention, as everyone knows that California is a Paradise for the mineralogist. There is such an abundance of them that a mere list would fill several pages of this book.

In the Vegetable Kingdom it will suffice to mention the celebrated colossal specimens of *Wellingtonia gigantea*, so abundant in the Yo-Senite Valley, which tourists never fail to visit. There are over six hundred of them, close one to another, forming one of the most imposing forests of the world.

The *Grizzly*, the finest of the lot, has a diameter of twelve yards, and attains the height of 120 yards. The first branch spreads at eighty yards from the soil. All those surrounding it are nearly of the same size. Several of them have been cut or have fallen. The inside of one of them is burnt, and in the tunnel formed by the bark, which still remains, horsemen can pass through easily, and cannot reach the top with uplifted hand. On the trunk of another, four men abreast can walk easily to a distance of seventy yards. Banquets and balls have been given in the interior of another, and several hundred people found ample accommodation. How many thousand years old are they? It is one of the most extraordinary sights to be seen in California.

On the fourth of July, I witnessed the rejoicings held in honour of the Independence of the United States. Flags and banners were conspicuous on all sides, and thousands of spectators were on the balconies and windows, witnessing the immense procession which paraded through all the

principal streets, and also taking part in the festivities by firing shots and crackers at random.

Many thousands of people joined the procession, and it was a grand sight to see all the different banners carried by representatives of all nationalities. The Chinese looked extremely curious and gaudy, and were numerous. Many were the barrels filled up with crackers and fired by the shopkeepers. What with the gun and the pistol shots, and the uproar of the people, it was an infernal noise; but fortunately there were no accidents nor fires, a fact which can be considered as remarkable in a town built of wooden houses.

At night there was a general illumination, which was also well worth seeing. The effect was magnificent.

CHAPTER VI.

: CALIFORNIA—(continued)

History of California — Its Discovery by the Europeans — Several Expeditions to California—Spanish Missions—Extraordinary Size of Plants—Pearls—Russian Colony—Captain Sutter—His Biography and his Extraordinary Adventures.

CALIFORNIA, which was for a long time thought to be an island, was discovered in 1532 by *Diego Hurtado de Mendoza*, *Diego Becerra*, and *Hernando de Grijalva*, sent especially for that purpose by *Hernan Cortez*. Cortez, not being quite satisfied with the result of these expeditions, started himself for these regions, and explored the coast and the Gulf of California, which has been known since as *Cortez Sea*. For want of provisions he soon returned, and very little more was heard of that country until 1539, when a rich Spaniard, of the name of *Francisco Ulloa*, set out at his own expense, and explored the eastern and western coasts. He landed at last, but not without opposition from the natives, who with much clamour and gestures set upon him and his followers with stones and arrows with such fury, that they would have met with a serious repulse had it not been for the valour of the mastiff dogs which he carried along with him. At last, he got such a good footing, that he was able to take possession of the country in the name of the King of Spain, with the usual formalities, setting up a cross as a memorial and a testimony of his having been there. Ulloa, during his expedition, which lasted two years, went as far as the mouth of the *Rio Colorado*. The map published in Mexico by the pilot Castillo, in 1541, represents the outlines of the coasts of California, nearly the same as we know them to-day.

About the same time, *Marco de Nizza*, or *Niña*, a Franciscan, who visited that country, on his return reported the wonders that he had seen. Stately cities with magnificent buildings, the very gates of which were enriched with turquoises and other precious stones, and whose in-

habitants went glittering in gold and mother of pearl, rich mines, and the flourishing condition of the kingdoms of *Acu*, *Tontecac*, and *Mareta*; whereupon the Governor of New Galicia was sent by the Viceroy of Mexico, with great hopes of receiving a confirmation of these reports; but either out of spite, or because he had real cause to do so, he represented all things as mean and despicable.

The next expedition was made by *Ferdinando de Alarcon*, who is reported to have sailed many leagues up a river called *Buena Guia*, and there to have received homage of *Nauca-gatus*, one of the chiefs of the Californian tribes.

In 1542, the intrepid *Juan Rodriguez Cabrillo*, to whom the conquest of California has been attributed, explored the Californian coasts, and discovered the Island of *San Lucas*, and another called the Island of *Possession*.

Thirty-five years later, in 1577, Sir Francis Drake* landed in Upper California, in a region considered to be situated north of San Francisco, which he called *New Albion*, and took possession of it in the name of QUEEN ELIZABETH. Here is the description which he gave of that country.

“The country is well stored with deer, grazing up the hills by thousands in a company; the men generally went naked all over, the women using only a piece of mat, or some such thing, instead of an apron; their houses were built only of turf and osier, yet so wrought together that they served very well to keep out the cold. In the midst of it was their hearth, where they made their fire and lay all round about it together upon several beds of bull-bushes. What their towns were, or whether they had any, is altogether unknown.”

This description applies well enough to the northern parts of San Francisco, known formally under the name of QUIVIRA.

Since the Jesuits established themselves in that country, in 1683, it has been better known, and it was considered as an arid country, and poor in precious metals. In fact, it was thought that the Jesuits concealed what they knew about the riches of the country. These considerations decided the enterprising Visitador, Don José de Galvez, to go to California. He found arid mountains, water scarce, the vegetation chiefly consisting of Mimosae, and no traces of gold or silver. But he saw what good work the Jesuits had done since their establishment in the country.

*See Humming Bird, Vol. 2, p. 113.

In this expedition he was accompanied by a talented and remarkable man, *Chevalier d'Asanza*, his secretary. This last stated freely what they had seen, and dared to speak of the Viceroy as a visionary, the result of which was his arrest, and his incarceration in the village of Tepozotlan, where thirty years after he made a solemn entry as Viceroy of New Spain. The Jesuits are the first who have thoroughly explored the Gulf of California. Father Kin, in 1701, attained the junction of the large rivers, Gila and Colorado. He fixed its latitude to $35^{\circ} 30'$. In 1769, very little remained of the establishments of the Jesuits, and the Franciscans established themselves in the country. Under the direction of Father *Junipero Serra*, they laid the foundation of the mission of San Diego. One year after, the same missionary took possession of Monterey. During the next three years Father Serra laid the foundations of seven more missions. All of them were successful at the time of his death, which took place in 1784. His successors continued his good work, with the result that in 1822 twenty-one of them had been established, amongst them that of Dolores, established in 1776, close to the actual San Francisco which existed in 1851, but was no longer inhabited by the friars since their secularisation by the Mexican Government in 1831. The buildings were still there, but they will be soon lost to view among the numerous villas and cottages that they are fast building.

The peninsula of California, which occupies a surface of land of the same size as England, was sparingly populated during the domination of the Spaniards. In fact, the whole population of that country was scarcely that of Ipswich in England. The centre of the peninsula is traversed by a long ridge of mountains, the highest of which is the *Cerro de los Gigantes*, or Giant's Mountain, about 5,000 feet high.

The soil is usually sandy and devoid of vegetation. Cactuses and mimosae are conspicuous. Water is scarce. When it is present, the fertility of the soil is prodigious. All the graniferous plants and fruit bearing trees produce abundantly, and give large returns. Onions have attained twenty-one pounds in weight. Cabbages have reached a diameter of thirteen feet. Turnips of one hundred pounds have been raised; but of course these are exceptions. Vines prosper, and a very good wine is made with them. Everyone is aware of the well-known size of one plant of vine at Sacramento, which gave ten thousand bunches at a time. It is now dead, but is replaced by some of its sprouts, which are

already producing a large number of bunches. The stem of the mother plant was exhibited in Philadelphia in 1876.

Of all the natural productions of the peninsula, or old California, the pearls are the most valuable, and have attracted many merchants to that country; but now it is chiefly restricted to Mazatlan, in Mexico. The oyster which produces the pearls has been chiefly found in the bay of Ceralvo, and close to the islands of Santa Cruz and San José. During the visit of Galvez in the gulf, 1768-1769, a soldier of the presidio of Loreto, made a rapid fortune by fishing for pearls on the coasts of Ceralvo. Since 1827, the population of old California decreased to about 5,000, and so it remained until 1850.

It was the same in Upper California until the time of the taking of that country by the North Americans in 1848. In that year the population of Upper California consisted only of 7,000 inhabitants of Spanish origin and several thousand Indians. They lived in the villages of *Los Angeles*, *San José de Guadalupe*, *Santa Barbara*, *Monterey*, and *San Francisco*.

North of San Francisco, a Russian colony of about 600 individuals lived entirely by themselves. They argued that they had an authorisation from the Spanish government to occupy the harbour of Bodega, the Ross's fortress, and thirty square miles of arable land. They remained there from 1814 to 1842, and it was vainly that the Mexicans tried to retake possession of the land. But what the Mexican government could not effectuate was brought about by the intrigues of the Hudson Bay Company. When leaving, the Russian sold to Captain Sutter their houses, cattle, and cultures for 30,000 dollars, although they had no legal title, the concession of the Spanish government having never been ratified or confirmed by the Mexican Republic.

This Captain Sutter had himself established a sort of independent dominion in California. The history of this enterprising pioneer, whose name is associated with the discovery of gold in California, is extremely curious and interesting.

John A. Sutter was born in Switzerland. Like many of his countrymen, a military career was his sole means of existence. He soon volunteered in the Swiss regiment that Charles X. in 1830 raised against the wrath of the French. He conducted himself with the characteristic loyalty of the Swiss. During the revolution of July he served as a lieutenant, and was wounded in the face.

Discharged with his comrades by the victorious nation, the young officer went to seek his fortune in the New World. First he resided in the State of Missouri (United States), and adopted the American nationality. Then he went west, traversed the American Continent to Oregon, and from there to Sitka, from which place he embarked for the Sandwich Islands. In 1839 he came back to California, and with the permission of the Government of that territory he settled there.

For several days he explored the bay of San Francisco, searching for the mouth of Sacramento River. Having found it and explored the course of that river, and its two affluents known now-a-days as Feather and American Rivers, he built a farm at the junction of Sacramento and American Rivers. What amount of resolution, perseverance, and daring he must have had to accomplish this, with a small number of followers, cannot be easily conceived when we think of the difficulties standing in his way, against making a permanent establishment in the midst of the hostile Indians, with whom he had to fight; but he was more than equal to this arduous task, and not only was he successful in repelling successfully the unremitting attacks of the Indians, but he subjugated them entirely, and after this he never had better and more peaceful labourers than these same Indians. The narration of all the perils to which he was exposed daily would fill a volume, and no one better than himself could write it, and that was what he was doing when I lived in California, but I do not know if it has appeared in print. At one time he was constantly fighting against the Indians, at another, scarcity of provisions compelled him and his followers to feed on wild roots. What energy and capability he must have possessed to escape from all these dangers is one of those problems which are not easy to solve, and which look more like fictions than realities. Around his farm he built a high and thick wall with *adobes* (very large dried mud bricks), which made it impregnable to the military art of the wild Indians. He named it in memory of his native country, *New Helvetia*. Of the Indians whom he subjugated, partly by might, partly by persuasion, some he made labourers, others he educated and disciplined as soldiers. He cultivated immense tracts of land, and soon acquired thousands of horses and cattle. To avoid attacks from the Indians, he made now and then military expeditions against the hostile Indians, and made himself feared and respected among all the neighbouring tribes. On one occasion he shot nine Indians who had

rebelled, and had their scalps put on the frontage of his fort. To the right of life and death over his people he added that of coining money. He paid his men with tin coins, exchangeable in his stores for clothes, kitchen utensils, eatables, and the like.

The Mexican Government acted with Captain Sutter as the Turkish Government with the revolted and redoubtable Pachas. They confirmed his authority by appointing him Commandant of the frontier. But an American emigration developing itself around New Helvetia, the Mexican Government, remembering the annexion of Texas, and fearing the same fate for New Helvetia, propositions were made to Captain Sutter to exchange New Helvetia for the mission of San José, and 50,000 dollars cash. But Sutter, who was fond of his establishment, rejected these advantageous terms.

The brilliant epoch of the existence of Captain Sutter continued until the arrival of the North Americans. His power was not able to resist this invasion. Everyone would suppose that wealth should have been the compensation of a power destroyed by the transformation of a semi-wild society to that of a civilized one. In his position of first pioneer of the country, owner of a vast territory and of thousands of heads of cattle and horses, how to believe that Sutter was not placed better than anyone else on the road to wealth, especially when, by the construction of his saw mill, gold was discovered. But it did not come to pass so. Thousands of individuals invaded his territory in search of the subterranean treasures before he had time to take his share; the frequent robberies of his animals during the first invasions, reduced considerably the number of his cattle and horses, as also the size of his domain, occupation being the only title of that epoch. The Indians also deserted him, or wanted to impose unacceptable conditions. Captain Sutter could have acquired a high position among the North Americans if from the beginning he had been in favour of them by giving the signal of insurrection, but instead of that, the faithful Swiss of Charles X. repudiated all idea of a revolutionary initiative, and with a certain number of his faithful followers and Indians, all well armed, he tried to repulse the Americans; but he did not succeed, and he remembered only too late that he had been a naturalized American before coming to Mexico.

Nevertheless, the conquerors admitted him into their army, and treated him with great respect. Dazzled by such a generous reception, Sutter, although a bad scholar in the

English language, offered himself as a candidate for the post of Governor of California. His candidature, which was unsuccessful, took a great part of his time, and all his affairs were partly abandoned, with great loss to himself, so that his situation of a rich landlord was reduced to that of a modest farmer.

Meanwhile, the well-known name of Captain Sutter will remain inseparable from that of California and of the discovery of gold in that country, a circumstance which has completely transformed that part of the world, and if it is not done yet, a statue of this celebrated man ought to be made and placed in the most conspicuous part of San Francisco.

Jean A. Sutter, familiarly called the old Captain, left New Helvetia in 1847. It was then a town of 15,000 inhabitants. He retired to Hock Farm, a property situated on the confine of *Rio de las Plumas*, Feather's River, near Marysville. In 1852, Captain Sutter was a fine man still, with hairs just commencing to turn gray. In spirit he was quite young, and very hospitable. Travellers in these parts were always cordially welcomed.

About 150 Indians of different sexes and ages resided on his farm. His wife, a son, and a daughter, were with him at the time.

CHAPTER VII.

Battles between Mexicans and North Americans—Declaration of Independence of California—Colonel Fremont—Annexation of California by United States—Discovery of Gold—Sacramento—Gold Diggings—Modes of Extraction of the Mineral.

THE annexation of the rich country known as California was expected a long time before it took place. The maritime voyage of Captain Wilkes and the bold expedition of Colonel Fremont, contributed much to that result.

The debates of the Federal Congress, in respect to the frontier of Oregon, called the attention to that part of the New World, of which General Cass in his speeches indicated San Francisco as the most important place on the Pacific Ocean. The conquest of that country was not the pretext but the real object of the Mexican campaign.

As to the colonists of Spanish nationality, in the midst of which lived several North Americans, for years back they were prepared for a change of domination, which nearly took place in 1836. Inspired by the example of Texas, Isaac Graham, a North American citizen, commanding thirty of his countrymen and sixty Mexicans, took possession of Monterey and proclaimed the Independence of California. A civil war was the result, and Commandant Alvarado, reinforced with troops, sent from Mexico, routed the enterprising Graham. Since that epoch, the native population expected every day the renewal of another such attempt. A revolution headed by General Miguel Orena, which brought about the expulsion of the Mexican Governor, preceded the declaration of war between the United States and Mexico.

Amongst the principal movers of this local revolution, M. M. José Castro and Pio-Pico manifested their intention to put their country under the protectorate of France or of England; but General Guadalupe Vallejo, the most influential of them, declared himself in favour of an immediate annexation to the United States, but not being able to gain his point, retired to his property near San Francisco. Francisco Castro and Pio-Pico, the first as Commandant General, the second

as Civil Governor, ordered the North Americans to evacuate the country during the next forty days under penalty of death.

In reply, a certain number of North Americans took possession of Sonoma, and hoisted a flag with the following inscription: *Republic of California*. This revolution, known afterwards as the Bear's Revolution, coincided with the arrival of the celebrated Colonel Fremont, who took the command of his countrymen. Castro, at the head of a numerous force, came to oppose him, but dared not attack him. Joined by Pio-Pico they retreated to Los Angeles, where they contented themselves by issuing martial proclamations.

At the same time Commodore Sloat arrived at Monterey on the frigate, *Savannah*, hoisted the American flag, and informed the inhabitants that their territory was going to be annexed to the United States. Commodore Stockton, who succeeded to Commodore Sloat, landed his sailors, and with Colonel Fremont, marched against Castro and his troops. Without even trying to defend Los Angeles, Castro and his followers fled to Sonora. By mistake, General Guadalupe Vallejo, the partisan of the annexation, was made prisoner by the North Americans, but was soon released.

After this, a Mexican named Flores, at the head of 600 men and four cannons, attacked the Americans near Los Angeles; but he was completely defeated, leaving a large number of killed and wounded on the field of battle.

After several other encounters of little consequence the Mexicans capitulated, the campaign ended, and soon after they assisted with the Americans at a popular assembly convoked in Monterey for the making of a Constitution for California. The first Governor of California was Colonel Fremont, nominated by Commodore Stockton. No one could fill better this exalted position than the Colonel, to whom the conquest of that magnificent country was chiefly due. But for all that, although all the life of Colonel Fremont had been devoted to public utility and to his country, after a series of altercations with Colonel Kearny, he was arrested and sentenced by a council of war. The new state of California shortly after avenged him by sending him as Senator to the Federal Congress.

John Charles Fremont, was born January, 1813, in South Carolina. He was the son of a Frenchman and a Virginian mother. Although his parents were poor, he received an excellent education in the college of Charleston.

For a time he was a professor of Mathematics. After that he was nominated in Washington, Officer of Engineers, and entrusted with the making of geographical maps. It was he who suggested to the American Government to send a commission of exploration through the Rocky Mountains to the Pacific Ocean. He was entrusted and appointed Chief of the Commission. With less than one hundred men, chiefly French, born in Canada, he successfully accomplished his first expedition in 1842. Two more successful expeditions followed the first. If it had not been for him, it is probable that the annexation of California would have been not only delayed, but possibly would not have taken place at all. Soon after the annexation gold placers, silver, and quicksilver mines were found, from the Sierra Nevada to the Pacific, and from Oregon to Los Angeles; but Sacramento and San Joaquin were the first countries explored. It is between these two rivers that most of the gold has been found. Sacramento is the route to the northern mines. San Joaquin that of the southern ones. Sacramento River is navigable to a distance of ninety miles up to the new town of Sacramento, built on the precise site where Captain Sutter had formed his establishment called New Helvetia. By its commercial activity, its population of 15,000 inhabitants, and its marvellous prosperity, Sacramento was considered in 1851, as the second city of California. Ships went direct from Europe or United States to Sacramento. Several steamers ply daily between that town and San Francisco. Others run from Sacramento to Marysville by Feather's River. Stage coaches run between Sacramento and the neighbouring places, pertaining to its territory. Hotels, Theatres, Gambling Houses, Concert Rooms, etc., are nearly as abundant as in San Francisco.

Sacramento, by its peculiar and favourable position on the route from San Francisco to New York, is the centre of the gold placers, and has in perspective a great future, as also has San Joaquin, with its river, navigable for about 120 miles up to Stockton. On a length of 400 to 500 miles, gold is found everywhere, either as dust nuggets, or contained in quartz. All the tributaries of Sacramento and San Joaquin contain gold, and great finds have been made where the course of the river suddenly change its direction, forming a curve. Gravel, lime, clay, all of them contain gold. In fact, it is found more or less everywhere, even close to the sea shore. How all that gold has come there is a problem which has not been satisfactorily solved yet. It is only by the

stubbornness of the chief of the Russian Colony that all this wealth has not been acquired by Russia.

As I related before, between 1814 and 1842 a Russian colony, the same which sold its houses, cattle, etc., to Captain Sutter, had been formed in California. It was despotically ruled by Commandants appointed by the Russo-American Company.

One day one of the colonists appeared before his Commandant, and told him that he had seen in a rivulet close by, some brilliant grains, looking like gold.

"Nonsense," replied the Commandant, who did not think that such a thing was possible. "*Go on with your work, and don't occupy yourself with what is not business of yours.*"

If that Commandant was alive when the first discovery of gold in California was reported to all the world, and exactly on the site of the colony, what remorse he must have felt at his own foolishness!!

That discovery came as a truly unexpected event, and took the world by surprise.

The scientific explorations formerly made in California by the celebrated geologist, Mr. Dana, Attaché to the expedition commanded by Captain Wilkes, did not ascertain the presence of gold in that country. He only remarks that the rocks of the districts *Uruqua* and *Shasté* resemble in many respects the auriferous rocks of the other regions, concluding with: "*But gold, if it exists, remains to be discovered.*" It is not a positive affirmation, but the indication of a possibility. Mr. Dana had, however, studied with much care the mineralogic character of the country from the river Columbia to San Francisco, through the valley of Sacramento, at about 40 miles from the place where an accident brought about the discovery which has had such an influence on the destinies of the whole world.

This great discovery took place in January, 1848. Two workmen, Messrs. Marshall and Bennett, were working at the construction of a saw mill for Captain Sutter, in the meridional branch of the American River (*Rio de los Americanos*), about fifty miles from New Helvetia, now Sacramento. The place was covered with oaks, pines and cedar trees. The saw-mill being concluded, it was found necessary to widen the space required for the wheel. Amongst a lot of accumulated mud, Marshall saw something brilliant.

"It is gold," said he, and in a short space of time, he and his fellow workman collected one hundred and fifty dollars

(£30) worth of this metallic dust. An assayer from San Francisco confirmed the opinion that the two workmen had made of their find.

Vainly Captain Sutter tried, in accord with his workmen, to keep this secret. The news was propagated with rapidity from one to another. A gold fever took possession of all the inhabitants of California, who abandoned their houses and families, and invaded the beautiful valley *Coluna*, as it was called by the Indians. Shopkeepers deserted their shops, doctors abandoned their patients, sailors their ships, soldiers their flag, farmers their farms and cattle. It was nothing less than madness amongst all classes of society. The Governor himself, Colonel Mason abandoned San Francisco, accompanied by his staff, and all of them worked the placers. Seven inhabitants in all remained in the abandoned town.

At first they were very successful, and the daily average of the god-send for each was about £20. A few of them made a large fortune in a very short time, such was the abundance of the metal which had never before been touched since its formation.

Soon after, many of the most enterprising miners explored the tributary streams of Sacramento and San Joaquin Rivers, and found also a large quantity of gold, but this did not occur without many extraordinary events taking place, such as disputes of possession, settled by the murdering of one of the two engaged in litigation, and sometimes the death of both. When the Indian in his turn protested against the violation of his land with his arrows, the miner replied with a rifle shot, and carried away the bloody scalp.

The passion of getting much gold had arrived at such a paroxysm of madness, that life was accounted as of no value, and many were the atrocious murders committed for the sake of GOLD. Some, in the anxiety of gathering as much as they could when they found a good place, forgot to make the necessary provision of food, and died of hunger close to their treasure.

The forsaking of all occupations for the finding of gold was followed by the scarcity of victuals, and all necessaries of life fetched a fabulous price. Four pounds sterling were paid for an ordinary breakfast consisting of sardines, bread, butter, cheese, and one pint of ale; beef fetched eight shilling per pound, eggs four shillings each, coffee sixteen shillings per pound. A bottle of brandy £10, one barrel of flour £5, one

drop of laudanum four shillings, etc., etc. In consequence of bad and salted food, scurvy and dysentery prevailed in the miners' encampment, and many died from these diseases.

In 1851, all this was altered. There were hotels everywhere, and a miner could lodge and board for about twelve shillings a day. Strong boots, for which he paid £10 before, could be had at about the same price as in New York. So many were the goods exported from all countries to California, that sometimes the price of some of them was even lower than the cost price, and many were the speculators who ruined themselves. Others became rich in a short time.

Immigrants from all countries were arriving every day, and I do not think that in the history of the world, such an immigration has ever taken place before. Every nation, every creed, every class were represented more or less, and for once harmonized together. Ignorance and education, nobles and plebeians, all mingled and worked together, and the lower classes accustomed to work and privations, succeeded better than the upper ones. At that time carmen were paid £2 per day, cooks £30 weekly, washerwomen were thought much of and gentlemen were anxious to marry them and so forth. It was the golden age for many.

One year after the discovery of gold, there were over 50,000 artisans in the mines. In 1851, they reached 150,000. Such an affluence of people in a few months made a large town of San Francisco. The lots of land which had been sold in the beginning at £2 10s., soon reached from £500 to £1,000. Houses were rapidly built and let at high prices. *Parker House*, the hotel situated in the Square was let at £40,000 yearly. The same rise in the value of land took place in Sacramento also.

The principal mines were soon transformed into towns, and Nevada City, Grass-valley, Rough and Ready, Coloma, Sonora, Mariposa, had, in 1851, between three and five thousand inhabitants each. Now that the gold dust and nuggets are getting more scarce, mines of auriferous quartz are worked with machines, mills, etc., galleries and wells are dug, and everything is done on scientific principles, canals for the washing of gravels containing gold are constructed, activity reigns supreme, and the works will soon reach the bowels of the earth and extract from it a large quantity of the precious metal. Many are the companies which have been formed for that purpose. The mines are divided in two categories, the wet-diggings and the dry-diggings. In the

wet-diggings gold is collected in the slime of torrents, rivers, and brooks, the gold is distributed equally, and the result is certain. They are worked in a very simple manner, and require very few apparatus. One tin basin is all that is necessary.

As much auriferous earth is put in the basin as it will contain, and sunk in the water, being shaken about with the hand. All pebbles are taken away by hand, and by moving the basin in a semi-circular way, the light earth is gradually carried away. Gold, being heavier than the earth, has a tendency to remain at the bottom, where it lays mixed with black sand. This is easily disposed of by blowing upon, and the gold dust is put away in a leather bag which the miner always carries in his belt, along with his revolver and bowie knife.

As can be seen, it is very primitive, and much gold is lost by such a process. That is the reason why several companies have been formed for the washing of the refuse of the first miners with mercury, and have been doing well.

In the dry-diggings it is only a matter of looking for the nuggets in the interstices of rocks. Sometimes much gold is found, and at others none at all. It depends entirely on chance, although there are some miners called *buscones* (searchers), who have had great experience, and know more or less where to look for the metal. Some large nuggets of pure gold, weighing several pounds, have been found in that way.

From 1848 to the middle of 1852, 174 millions, 780 thousand, 877 dollars are said to have been extracted from the mines of California; but it is probable that it is underestimated, because a large quantity of gold must have been found in the years 1848-49 on which no report has ever been made. It is estimated that the extraction of 1852 alone reached the fabulous amount of sixty millions of dollars, or £12,000,000. All the other mines of the world did not produce half that sum during the same year. The ordinary pay for miners when working for companies was £1 per day for outdoor work, and £1 10s. for underground work.

In the dry-diggings, the work can be done profitably only during six months, March to July. In the other months, the scarcity of water makes them unprofitable. The best season for working the wet-diggings is during the fall of water from June to November. During the remainder of the year, less profit is made, and the melting of snow in the spring stops all the works.

To be a good miner requires strength and moral energy. One must know a little of several handicrafts, such as digger, stone-cutter, ploughman, bricklayer and wood-cutter, be able to resist the intensity of the sun's rays, the humidity of the dew and rain, and so forth. In fact it requires a fine constitution and the habit of hard working, as well as to be able to fight against the Indian or others, for the preservation of one's property.

No other title is required than possession. Everyone has a right to forty five feet in length on the bank of the river or elsewhere with the power to follow the gold vein as far as it goes in the adjacent hills. For a larger site, it requires the association of several individuals. In the quartz mines, no special rule is fixed about the size of the claim for each individual. Property exists as long as work is resumed. But if work is entirely abandoned during ten days, anyone can take possession of it. To this simple and rational system is due the extraordinary extent of the excavations on all sides.

Soon after the discovery of gold, all sorts of bad characters from all countries invaded the mines. Robberies and murders were very frequent, in consequence of which committees of public safety were formed and the *Lynch Law* was applied with excessive severity. In a very short time, judgment and execution were carried out.

But as a rule a cordial understanding existed between all the miners. Close together you found representatives of all countries, American, Indian, German, Russian, French, English, Spanish, Italian, Chinese, etc. The latter is the most patient, the French the gayest, the German, American and English the most industrious and obstinate. Never before has such a cosmopolitan work as that of the Californian mines ever been seen, and there is no doubt that the discovery of gold in California opened a new era in the history of the world.

As I shall have to write again about California in describing my second voyage to that country, in 1877, I shall leave it for the present, and continue the relation of my travels.

CHAPTER VIII.

Departure from San Francisco — At Sea — Arrival at Acapulco — Acapulco—Its Population—Department of Guerrero—Principal Rivers—Pearl Fisheries—Chilpancingo—Ruins of Xochicalco—Quetzalcoatl—Expeditions of Cortez—General Alvarez—Pintos—Mineral Wealth.

N the 18th of August, 1852, I embarked on the ship Heva, Captain Magne, bound for *San Juan del Sur*. At first, we had very bad weather and contrary winds, and made little progress. After that, we had some calms, which were very trying, although fish was very abundant. We caught doradoes, bonitas and another called *black-fish*, or Sea Perch. These fishes were in such plenty that we caught over two hundred of them in a few hours. It was a welcome addition to our diet, which was very limited, and consisted chiefly of preserves, salt meat and pork.

Although its flesh is rather tough, we liked it, and we ate them fried, boiled in bouillabaise, and in matelotes.

Every day it rained at certain hours, and in such abundance that it was scarcely credible.

When in the latitude of Acapulco, and very near that port, where we had to call in order to renew our provisions, the wind abated suddenly, and for eight days we experienced, in a certain way, the torment of Tantalus, that of seeing the harbour without being able to effect an entrance. There are only two channels to effect an entrance in the harbour, one wide, but very dangerous on account of the many rocks with which it is strewed; the other safe, but so narrow that scarcely two ships can pass at a time.

Every day we came close to that pass but could not get in, and we were obliged to go at large again.

After eight days of these manœuvres we were at last successful, and entered the bay of Acapulco on the 10th of October. This bay is very fine, and about six miles in circumference. It is sheltered from all sides, which makes it very safe, but very warm. It looks more like a lake than

anything else. The water is always calm and fish is extremely abundant.

The town is small and built at the foot of the hills which surround the bay. Excepting the military residence and churches, very few good houses were to be seen, the bulk of them being more like Indian huts than anything else, the best made of adobes and covered with palm leaves. In 1852, its population was about 3,000, but it had been rapidly increasing for the last few years, in consequence of its having been selected as a port to put into, by the American company of steamers plying between San Francisco, Nicaragua, and Panama.

During the domination of the Spaniards this port was celebrated as the one from which all the Spanish galleons went to, or returned from Mexico to the Philippine Islands. It was also an important military station and the centre of the pearl fisheries. Its population was composed of four classes of inhabitants, white, black, Indian and Chinese, with all their varieties. The blacks are robust, but very indolent, and the others more so. There were four large American hotels receiving the passengers, who were constantly passing through. Gambling houses were also conspicuous.

In the rainy season it is considered unhealthy, in consequence of the marshes which surround the town. Fevers are of a bad character and common; but I did not hear that the vomito, or yellow fever had ever made an appearance. In the dry season it is healthy enough, but always very warm. Close to the town is a mountain called the Telegraph, in consequence of one of those establishments built on the top of it. It is a fine walk, and there is a splendid sea view from its summit. This mountain has been partly cut by the Spaniards. If the work had been completed, it is certain that the salubrity of Acapulco would have greatly benefited by it, as it would have been the means to bring over sea breeze to the town. Even what has been done by the Spaniards is remarkable, and has done some good.

There is another fine walk, that of the town to the fort which defends the entry of the harbour. It is planted with fine trees and is a great resort for the population.

Indian women have drinking stalls placed along this walk and supply lemonade and other refreshing drinks at a moderate price.

The market is well supplied with provisions, especially chickens, eggs, and fruit of all descriptions. Plantains,

oranges, and cocoanuts are abundant, and can be had at a nominal price. The Indians who sell these commodities are very interesting to look at.

The aspect of the country is pleasant, and in the dry season many pleasant excursions can be made in the suburbs.

That part of the town inhabited by the Indians is spangled with rocks and stones, as if it had been destroyed one time or other by earthquakes. Besides the steamers plying between Nicaragua, Panama, and San Francisco, there was a line of small steamers plying between Acapulco, San Blas and Mazatlan. This gave a certain animation to the place.

From Acapulco to Mexico there is 340 miles. It can be done in eight days on horseback, but the road is rather bad in the rainy season, although safe enough, excepting near Mexico. They are actually building a railway between the two cities. The principal towns between Acapulco and Mexico are Chilpancingo, Iguala and Cuernavaca. Several villages and haciendas are also met with; the principal are: Hacienda de Buena Vista, Mescala, Tepecoalculco, Hacienda del Platanillo, Puente de Ixtla, Alpuyeca, Huitzilac, Cruz del Marqués, Topilejo and Tepepa.

Acapulco belongs now to the State of Guerrero. Formerly it formed part of that of Mexico. As I shall not have to speak again of that country, I shall give a history of it now.

The State or Department of Guerrero occupies in latitude from $16^{\circ} 36'$ S.E., to $17^{\circ} 6'$ N.O.; in longitude, $98^{\circ} 37'$ to $100^{\circ} 22'$ of the meridian of Greenwich, forming a direct line of 400 coast miles.

Its limits are, on the north, the Departments of Michoacan, Mexico and Puebla; on the east, the Department of Oaxaca. Its coasts, which comprise about 400 miles in a north-western to a south-eastern direction, are washed by the Pacific Ocean. Its superficial area is about 17,724 square miles, attaining the length of 330 miles and a width of 159 miles in its wider parts. Its actual population is about 350,000 and Chilpancingo is the capital of the Department.

Its principal rivers are *Sabana*, *Papagayo*, *San Marcos*, and *Coyuca*. The first has its source in the mountain of *Brea*, and empties itself into the lake of Naguala. The Papagayo springs from the mountain of Jaliaca, in the district of Acapulco, and falls into the Pacific. It is the most important, and in the rainy season it can only be crossed in boats. During the domination of Spain a bridge was begun

at the Peregrino passage, but it has remained so until the present time, and the materials are scattered in all directions. Being on the route to the Capital, it would be very important to have it built, this being a dangerous passage for travellers.

San Marcos river, which is only 21 miles long, springs from the mountain of Santa Elena and empties itself into the Pacific. *Coyuca River* springs from the Sierra and falls into the Pacific. There are three lakes in the district, that of *Naguala*, *San Marcos* and *Coyuca*. Fish are abundant, and a large quantity are caught and sent in the interior.

The only port of importance is Acapulco. The pearl fisheries, which scarcely exist now, were at a time one of the principal industries of the district. They are of good water, and many splendid specimens have been gathered at different times. Some years later, south of Acapulco, between that port and Tehuantepec, I have seen many heaps of shells, which proves that pearl fisheries of consequence exist all along the Pacific Coast. I don't know if they are there still, but if such is the case, it would be worth sending a vessel there and pick them up, these shells having a good market value in Europe.

The chief market for pearls on the Pacific is Mazatlan, a port north of Acapulco. Large quantities are annually gathered in the coasts surrounding that port, but the bulk of them are small and called *Mostacilla*, or mustard seed. The large and perfect round ones are scarce and valuable, even there.

The shell found on the Pacific Coasts which produces pearls appear to me to be a species of Oyster, *Ostrea*, and not a *Meleagrina*, or *Avicula*, as in the Indian Seas.

It is said that all shells containing pearls are easy of detection, having external excrescences corresponding to the internal cavities containing the pearls. Smooth and perfect shells do not contain pearls according to the fishermen.

If this is true, and I am of that opinion, much time would be spared in the gathering of them, as also a great many could be returned to their element for future use, as explained under.

It is a well-known fact that pearls are the product of a secretion of the animal, which is produced by irritation. When the shell opens its valves, if by accident sand or such-like finds its entrance inside, the animal is so much irritated by it, that it begins to secrete mother of pearl and covers the

foreign matter with it. *Hence the pearl!* This is so well-known in China, Japan, and other Asiatic countries, that the natives gather oysters, open them, and introduce round shots or beads, or such-like, for the animals to cover them with mother of pearl.

After a certain time, they gather the shells, destroy them, and take out the pearls obtained by that process, which could be applied also to the Pacific oysters, and I have no doubt that the industrious, who should undertake to create pearls by the Asiatic process, on more scientific principles, would reap a good and valuable harvest.

Pearl fisheries, as they are conducted at the present, are like a lottery. It may pay, or it may not. The fishermen sell the shells without knowing if they contain pearls, and the speculator buys them also without knowing what they contain. But if what I said above, about the exterior deformities to be seen on the shells containing pearls is true, with proper care it would be easy to distinguish at once the shells containing the pearls, and probably the best of them would be found in the shells most deformed. It is a very interesting study to make, and I call the attention of scientists and merchants to it.

The boats used for the fishing of pearls are about ten to twelve yards in length and having from four to six oars a side. A sufficient store of water and provisions for eight or ten days is carried.

They start for the pearl banks from the beginning of June to the end of September, the usual time for fishing these molluscs. As many expert divers are taken as the boat can accommodate. They are under the command of the *Armador* or chief, who is generally well paid. He is responsible for everything. It is he who advances money to the divers, and who buys pearls from others, if he has the opportunity. He selects the banks to be worked, supplies food to all his men, and in fact is the representative of the merchant who employs him. When on the bank, he supplies the divers with victuals, a knife, and a quarter-of-a-yard of blue cloth or baize. He remains on the bank until the loading of the boat is completed. After deducting a fifth of the whole of the shells raised for the Government, two heaps are made with the remainder, the *Armador* selects the one he pleases, the other belongs to the merchant who supplied the money.

Of late, I think that the Mexican Government has given

up its share of the shells, and replaced it with a small tax of eight shillings for each diver employed.

The divers are provided with two meals a day. The diving begins about eleven a.m. and ends at two in the afternoon. The depth of the banks varies from three to twelve fathoms. The quantity of pearls procured by six boats is evaluate to four or five pounds weight, worth from £1500 to £2000.

There are many places where the divers are afraid of going down on account of the sharks and *mantas*, or large poulps. They are more afraid of these last than of sharks. It is very seldom that the sharks have the upper-hand of them. They keep them away with a small stick, and if necessary they make a good use of their knife. Opposite the *Island of Tiburon*, situated in la Paz, (Lower California) it has always been considered a good place for the fishing of pearl oysters. This island is inhabited by the *Ceris* Indians. These Indians guard jealously that part of their territory, and occasionally they bring pearls and careys (tortoise shells) to la Paz for sale.

The capital of this department is Chilpancingo, nine miles from Guerrero, the former capital. It has a population of about 4,000 inhabitants, but the port of Acapulco, although with a less population, is the most important city of the Department. It is the residence of a chief magistrate, the Captain of the Port, a municipal council, and several judges. The Custom House gives employment to about fifty persons. The fort has a garrison consisting of one company of infantry and one company of artillery.

The chapel of *Nuetra Señora da la Soledad* is used as the parish church, since the destruction of the latter, by an earthquake in 1790.

The principal articles of exportation were cattle, sheep, pigs, fowls, turtles, eggs, beans, rice, sugar, vegetables, and fruits, amounting to about £5000 in 1852. Those of importation were flour, spirits and wines, conserves, furniture, and all sorts of European fancy articles, but the demand was limited.

It is in this department that the celebrated ruins of *Xochicalco* are situated at 60 miles from Mexico and 271 miles from Acapulco. It is one of the most important and finest ruins of the primitive inhabitants of that country.

Xochicalco, in Mexican, means flower's house. It is thought that it was dedicated to *Quetzalcoatl*, the white bearded man supposed by some to be *Saint Thomas*.

Here is a revised and enlarged description of that which I gave of this ruin in the *Etnographical Review* of Paris, in 1887.

The hill on which the palace or temple of Xochicalco was built is the work of men, or at least it looks so; because it is entirely covered with stones, so that if the centre contains natural earth or rocks, it is impossible to know it from the outside. It occupies about three miles in circumference.

It is surrounded with a wide and deep ditch. In form, it is conical and divided into five strata or terraces of different heights plastered with large stones. It is about 330 yards high.

The said terraces are not horizontal, but inclined to the south-east. On the summit, there is an oblong platform, which from the north to the south is 92 yards wide against 98 from east to west. This platform is circummured to a height of over two yards, but, unfortunately, little remains of these walls, the stones having been carried away and made use of in the building of their *haciendas* (large farms) by the landlords of the neighbouring lands, and not only they have taken away the stones of the walls, but also many remarkable carved stones which adorned the walls of the temple.

In the middle of the platform is the temple of *Xochicalco*, a very old ruin supposed to have been built by the *Toltecs*, the first inhabitants of Mexico, of which a record exists. This temple, which was probably also a fortress, is still called, *the Castillo*, or fortress.

Alzate, the well-known Mexican historian, says: that the temple was five storeys high, but according to Nebel, who says that he has seen the ruins of three portals on the second storey, it is supposed that it was only two storeys high, these portals, or doors, indicating that they were the entrances of the temple in which their religious exercises took place. To-day only part of the first storey exists, the south corner of the second storey was still in existence in 1877.

In the principal room existed a *Chimotlatle*, or throne, cut in one single stone, well polished and covered with hieroglyphics. No one knows what has become of it. Probably it will be found one day in an Indian hut, in the surrounding districts.

It is admirable to see how the mason's work has been done. All the stones used in the construction of the temple have been well polished, and so well joined together, without any apparent use of mortar, that it is almost impossible to see the joints. When finished, it has been covered with hiero-

glyphics and figures, among which the most conspicuous are those of the corners representing dragoons ejecting water from their mouth, and all along the building, figures of warriors seated with their legs across one another, and with their heads covered with helmets adorned with long plumes of green feathers and the head of a snake. Other remains of small animals, flowers, etc., are also to be seen, but it is difficult to make out some of them.

It is a wonder how these Indians could build such a fine and solid building, if we consider that a prodigious quantity of large stones was required for it, and no quarry of the same stone as used, has yet been found in the neighbourhood. From whence they came, how they managed to carry them there, and heave them up to the summit of the hill, is a matter of amazement, when we consider that machines were unknown.

Another remarkable fact which this temple has in common with all similar Mexican antiquities, is that the four frontages correspond exactly with the four cardinal points of north, south, east, and west, as it is also the case with the Egyptian pyramids, which clearly show that they were experts in astronomy. The first story is twelve yards high, including the cornices, and sculptured all along. Some of the figures occupy two or three stones, showing that they have been done after the completion of the temple. From what remains of the second story it must have been of the same height. Some remains of vermilion can still be seen, and it is probable that all the temple was painted of that colour.

In the neighbouring hill of *Tepeyoculco* exists a mine of cinnabar, which has probably supplied the colour.

The quality of the stone of this valuable architecture is a sort of pale gray stone, like that employed in the millstones of Europe, and this is the reason why it has been so much sought after by the farmers, for the construction of ovens and such like. Each stone is two yards long, one yard wide, and one yard thick. Those of the corners are still larger.

The ditch, which surrounds the hill, the covering of the terraces, the wall which protects the platform, all tend to show that it must have been built for the purpose of a fortress, as well as that of a temple.

The hill presents the aspect of a large snail.

As it was impossible to climb over the wall, from one terrace to the other, it was necessary to walk a distance of about six miles before reaching the platform.

This shows that the Indians of that epoch were experts in the military art, as nothing better for defensive purposes could be done, even at the present time.

All the platform was surrounded with a thick wall, two yards high, from which they could successfully defend its entrance.

On the north side, at the foot of the first terrace, is the entrance of a cave or subterraneous place, giving access to several passages, the principal of which ends in a large room, fourteen yards long and twelve wide. Remains of the stone pillars could still be seen. The floor was covered with lime painted red, the same as the walls.

In one corner exists an opening of conical form, by which air and light entered in the room.

It is said that communication existed between this room and the temple above.

If the Indian who acted as *alcade* (mayor) in 1877 is to be trusted, another subterraneous passage considerably greater, existed between the hill and the suburbs, having an exit several miles away. I should not be at all surprised at this, as the same exists in other ancient Mexican fortresses which I have visited.

These subterraneous places were made for the purpose of supplying the fortress with victuals and water, and also as a way of escape in case of emergency.

In 1769 a large sculptured stone, representing an Indian devoured by an eagle, could be seen west of the hill, on the road to *Miacatlan*. It was a fine work of art. In 1877, when Alzate visited the ruins, he found only some fragments of it on which he perceived traces of the eagle.

From the hill, four roads went north, south, east and west. One of them leads to the town of *Xochicalco*, which must have been a place of importance at one time or another. The actual village of Xochicalco stands south of the ruin at a short distance.

I am of opinion that this temple was built in honour of *Quetzalcoatl*, who was considered to be a god by the Indians.

The word *Quetzalcoatl* signifies green feathered snake, from *quetzal*, green feathers and *coatl* snake.

The warrior who is constantly sculptured on the walls of the temple has his helmet adorned with plumes of long green feathers, in the centre of which is the head of a snake. It is a representation of the green feathered snake, or *Quetzalcoatl*.

The feathers are those of the bird known as *Quetzal*, by the Indians of Quetzaltenango, and those of Central America, where the bird is rather common. It is the **Pharomacrus Mocinæ of la Llave*, or *Long-tailed Trogon*, in English, *Couroucou* in French, the finest bird of America.

It has two long golden-green middle tail feathers about one yard long.

The helmet has the shape of a mitre, and corresponds exactly with what the historians Clavijero, Sahagun, Solis and others say about Cholula, another temple, not very far off, built also in honour of *Quetzalcoatl*.

Quetzalcoatl, the Mexican god, is supposed to be the founder of the celebrated *Tullan* or *Tula*. When that town was deserted by his order, he came to *Cholula*, but this emigration took a long time and it is reasonable to suppose that he stopped and remained some time in *Xochicalco*. From Cholula it is supposed that he went to Goatzacualco where he embarked. But I think that if he really went there, he passed first to Oaxaca, near which city, he built the now famous ruins of *Mitla*, and from there, went to Quetzaltenango and Central America, or possibly, from the latter place to *Guatzacualco*. Lastly the name of *Xochicalco*, or House of Flowers, is also in favour of my opinion; as it is a well known fact in the ancient history of Mexico that *Quetzalcoatl* is the one, who first abolished human sacrifices among these people, and replaced them with sacrifices of animals and flowers. Now it only remains to say that the first inhabitants of that department must have been *Toltecs*, afterwards Chichimecs, and it is not certain that they were under the dependence of *Moctezuma*, when Mexico was conquered by Fernando Cortez. It is more probable that like their neighbours, the Indians of *Mechoacan*, they were independent from the Mexicans.

The resume of all this is, that when Cortez conquered Mexico it was not until later on, about 1522, that he heard from *Sincicha*, the King of *Mechoacan*, who submitted peacefully to his authority, about the countries, whose coasts are washed by the Pacific Ocean. Cortez sent several expeditions to explore these countries, which resulted in the discovery of the Pacific Coast, from Tehuantepec to the Gulf of California. Meanwhile, he retired for a time from Mexico, and built a fine residence in *Cuernavaca*.

*See Humming Bird, 1891, Vol. 1, pp. 6, 18, 19.

It was in the course of these expeditions that Hernando de Grixalva discovered the coasts of California in 1534; but Acapulco was already known to Cortez, as in some of the letters which he wrote to *Charles Quint* he mentions the pearls found on the coasts of Acapulco. In 1535 he embarked with 400 Spaniards and 300 slaves, and explored the Gulf of California, known afterwards as Sea of Cortez. It was during this voyage that the new Vice-King, *Antonio de Mendoza*, was sent to Mexico.

Nevertheless, Cortez proceeded with his voyages of discoveries in California, and for a long time nothing was heard of him. News of his death reached Mexico. His wife, Juana de Zuñiga, sent an expedition for the purpose of ascertaining what truth there was in that report, which turned out to be false. Cortez, after many perils, reached safely the port of ACAPULCO. This is the first time that the name of *Acapulco* is mentioned in the history of the conquest of Mexico. *Francisco de Ulloa*, with instructions from Cortez and at the expense of the latter, continued the voyage of discovery, so well inaugurated by Cortez, and during a navigation of two years, explored the coasts of the Gulf of California up to *Rio Colorado*.

As I said before Acapulco was a very important port and remained so during the Spanish dominion, and is now quickly recovering its importance.

When the railway, in course of construction from Acapulco to Mexico, will be concluded, it is probable that a large traffic will take place between the two cities, and will greatly increase the prosperity of the first.

The State of Guerrero has given birth to the celebrated General, Don Juan Alvarez, who entered Mexico with his troops on the 15th of November, 1855, and occupied the Presidential chair until the 11th of December of the same year, when he renounced it, in favour of General Comonfort. On the 19th of December, General Juan Alvarez retired for the south with his troops.

Alvarez, a native of the State of Guerrero, and Comonfort, pronounced against the government of Santa Anna on the 21st of July, and contributed greatly to the fall of the latter. He was victorious in many battles, and the end of it was his entry in the capital, and his proclamation as President of the Republic. But unaccustomed to the court, he soon had enough of it, and returned with his followers, all volunteers, to his farm house.

A peculiarity of some of the inhabitants of the State of Guerrero, but which is sometimes seen in other tropical countries, is the sight of the *Pintos* (spotted Indians).

The inhabitants, to which the name of Pintos is applied, have certain parts of their body spotted with white stains about the size of a sixpence. It does not matter what is the colour of the person who is so spotted, black, yellow, or white, the white stain is lustrous and conspicuous, and gives them a curious appearance, especially to the blacks. The effect of these white stains on their black skin is rather ludicrous. It is a cutaneous malady of which very little is known. Entire villages are affected with that malady, and I confess that I had some hesitation in eating *tortillas*, (a sort of pancake made of maize, the bread of the country), cooked and manipulated by the hands of stained women; but it seems that there is no risk in doing so. This curious malady is only catching by inoculation and cohabitation of the sexes.

I have known a rich Spaniard willing to pay a large sum to anyone able to cure him; but I really do not know whether it is curable. If it is, I am afraid that it would require a long time.

Those who are so affected, feel a great itching in these parts, and are constantly seen scratching themselves, and taking of their skin, a sort of scaly skin powder, quite visible to the eye. Besides they smell badly. In the *tierras calientes* (hot countries) few are the inhabitants of the State of Guerrero who are not affected by this malady, to which I call the attention of the medical profession.

I will conclude my narrative about the State of *Guerrero*, by calling the attention of enterprising miners to the various metals and precious stones found in that State. Rich placers of gold have been found in *San-José—Piedras-blancas*, and many more are said to exist. Silver, which is found abundantly and nearly pure, is worked in the mines of *Tasco*, *Tehuilotepic*, and *Juliantla*. Silver and gold mixed, in *Tepautitlan*, Cinnabria or Quick-silver, is abundant in all the State, as are also copper, lead and iron. Coal has also been found in several places. Sulphur and saltpêtre are abundant. In precious stones, amethyst is very common, and I have been told that rubies, topazes, emeralds, and even diamonds are to be found. During the War of Independence, some white crystals of a good size, were given to General Guerrero, by one of his soldiers, as having been found in the State, and when presented to a lapidary in Mexico, he declared that

they were most valuable diamonds! Therefore, I believe that enterprising parties with capital, could not do better than to explore the State of Guerrero for its mines, and probably the result will be very satisfactory.

CHAPTER IX.

Sailing from Acapulco — At Sea — Arrival at Nicaragua — San Juan del Sur—Its Climate—Population — Tropical Forests — Luxuriant Vegetation — Animal Life — Birds and Butterflies— Transformation of Species — la Virgen — Lake of Nicaragua— Mountains of Ometepeque and Madera.

ON the 18th of October, after having made a large provision of cocoanuts, plantains, oranges and lemons, we went on board our ship and sailed from Acapulco, en route to *San Juan del Sur*.

Up to the 5th of November, the day of our arrival to that bay, we experienced changeable weather, tempests, calms, and good breezes, accompanied with warm weather; but this second part of our voyage was not so unpleasant as the first, as we were always at a seeing distance off the coasts of Mexico and Central America.

Many were the beautiful sun-sets seen, and we were never tired of such magnificent spectacles. We also saw a prodigious number of fish, sharks, porpoises, dolphins, bonitos, doradoes, etc., and fortunately for us we took a good many, which helped us considerably in our diet, the Captain having been very parsimonious in his purchases, and treating us very poorly in that respect. Our ship was also visited by a considerable number of birds, especially some called *fools*, or *fous* in French, (*Sula bassana* ?), gulls, sterns, peterhills, and others. We took a good many and made some fine skins with them. These birds were easily caught. They perched on the yards, and at night, some of the sailors went up with a bag, caught them by the legs, and put them in the bag. The ship's cat caught also a good many of the smaller ones. Cephalopods, of the genus *Nautilus*, were also seen in great abundance, with their sail opened and floating on the sea. Many were caught to experience with, the electric shock which is one of their means of defence, but we returned them to their element soon after.

On the 5th of November, we arrived at *San Juan del*

Sur, a miserable bay opened on all sides, and in which ships and steamers are obliged to anchor at a good distance from land.

We had been eighty days, including our stay of eight days at Acapulco, on our way from San Francisco to San Juan. A very long time for a distance of 3,800 miles, but this was partly due to the bad weather, contrary winds, calms, and also the bad condition of our ship. So it is easy to conceive our joy on that day. We had quite enough of the bad living and incommodities of this voyage.

San Juan del Sur, in 1852, was a very small place, consisting of Indian huts, hidden in the greenness of a tropical vegetation, and several hotels hastily built, to supply the wants of the numerous passengers passing constantly through, from New York to San Francisco and vice-versa. In the American hotel, the charges were twelve shillings a day, and in the French, from eight to ten shillings. I went in the last.

I remained five weeks in San Juan, and the rainy season being not quite over yet, I was able to collect a good many insects, chiefly *Coleoptera* (beetles) and *Lepidoptera* (butterflies).

During that month, I saw several large arrivals of passengers going to, or returning from San Francisco.

As a rule, those coming from North America, or from Europe were in better health and spirit than those returning home. Many of the latter fell sick at San Juan, and could not continue their voyage. Some died and were buried forthwith. I heard that hotel keepers and others had something to do in the matter, being the natural heirs of the dead. I cannot say that this rumour was false or true, but what I can certify is that the climate of this miserable place is very unhealthy during the rainy season, which lasts from May to December, and even more sometimes. All passengers passing through the isthmus should select the months of January to May. The inhabitants of the place consisted of a mixture of black, white and Indians, with a few Americans and other strangers.

The Indians and blacks suffered as much from the fevers as the others, and were poor representatives of their respective races. The vegetation of the neighbourhood of San Juan was quite remarkable and magnificent. It was my first sight of a tropical country and its forests. Nothing can compare with the magnificence of a tropical forest. It is so sublime and

imposing that the first impression felt is that of melancholy, and the sad feeling of how little we are in this world in comparison with the works of the Creator. Each time that I have entered a virgin tropical forest, that I have ascended the summit of a large mountain, that I have been facing the Ocean, or even the immense Mexican prairies, I have felt the same impression, that of our insignificance in regard of such magnitude.

It is quite impossible for those who have not travelled, to have an idea of that sensation, although it may be felt even by them if they are of a contemplative mood. The study of astronomy, the contemplation of the sky, of high mountains, of the sea, of vast horizons, will produce the same effect to those of a sensitive mind.

I really do not know which sight is more effective. Although all of them point to the same end, that of our insignificance, the emotions are quite distinct one from another.

In putting foot in a virgin forest you feel melancholy. In attaining the summit of a high mountain, or in discovering the wide horizon of the sea, or prairies, you may feel the same impression; but it is mitigated by the magnificent sceneries displayed to your view, and you cannot do less than remain in contemplation before them.

In the tropical forests, where the sun never penetrates among the thick foliage of the trees, shady even at noonday, rich in the beauty and the variety of their luxuriant foliage, the immense variety of trees and creepers hanging from bough to bough, you feel more than anywhere else your loneliness. At every pace, you expect the sudden meeting of jaguars, pumas, or other ferocious animals, but you seldom see any. One would think that a large number of animals must exist in these forests, but it is not so. It is only on the banks of rivers, or in the openings, that life is abundant. Possibly the interior of the forest is inhabited, but its inhabitants are so scattered that they are hardly seen at all. It seems as if all that luxuriant vegetation had no other purpose than to be the sleeping resort of birds and animals.

As soon as the day appears or disappears, it is a perfect cacophony. Wild screams of animals and birds are heard in all directions. The roaring of the jaguars and pumas, the howling of the monkeys, the discordant shrieks of the parrots, the screaming and chirping of birds, are all heard at one and the same time. IT IS INDESCRIBABLE !

The whole of them are looking for a resting place, or are starting in search of their daily food.

In the middle of a fine day, when everything is in a state of repose, no sound is to be heard; the fall of a single leaf, the sudden rising of a bird, the flying or the sing of insects, make you start and look around. On the contrary, when the wind is blowing with impetuosity, the cracking of the trees, the fall of trees and branches, and the frightened animals seeking for a place of safety, produce a terrific noise, and you feel a sort of terror.

In the tropics, there is no winter, the trees are always adorned with their leaves, flowers, or seeds. Numerous trees, among which the beautiful palms, the gracious fern trees, the majestic bombax, cedar, mahogany, syphonia, and other large trees elevating their heads above all the others, are conspicuous. Creepers and climbing plants descend in all directions from the tops of the trees to the soil, reascending again and intermixing one with another in an inextricable confusion. Large quantities of parasitical plants, flowering orchids, bromelaciae and others, are seen in all nooks and corners, and cover entirely the trunks of the giants of the forest, perfuming the air with their sweet aroma. On the soil, fallen seeds have developed into young plants and another vegetation invades all available spaces, struggling for the mastership one against another. Large rotten trunks of trees, the remains of veterans of the forest are scattered on the ground, and falling to pieces, contributing with the dry leaves and the humidity, to the formation of a rich and fertile soil, in which ferns, begonias, small palms of the genus *Chamaerops*, and others are growing fast and occupying what remains of available space; but some of the most curious are the climbing palms, which stem is generally well protected with long and sharp points. In search of air, by means of the hooked form of their leaves, they reach the top of the highest trees, above which, they expand their foliage and flowers.

Next to the climbing palms are the great variety of climbers of all sizes and shapes. Some are very thick, attaining about one yard in circumference, others are slender. They twist around the slender stems, they drop from the branches, they grow along the trunks, they stretch between the trees, forming bridges, much used by monkeys for passing from one tree to another; in fact, they seem to have come into existence there, for the sole benefit of these animals, as nothing can give a better idea of the aspect of

these plants than by comparing them to the numerous cordages of ships, or to gigantic gymnastic ropes.

Some of them are of the greatest use to the traveller, as I have experienced many times. It is to supply drink when water is nowhere to be had, which is a common occurrence in the large tracts of the primeval forests. The way to obtain it, is as follows:—Having selected a good sized climber, with the *machete*, (a large knife something like a cavalry sabre), you cut a piece about one yard long, and by keeping it upright, a liquid, something like sweet water, will trickle from it, enough to fill a large wine glass with. If more is required, the natural fountain is close by. By repeating the process, with time, you can fill as many glasses as you like. I learned this from the Indians, and it has been of much use to me at different times.

Where roads or footpaths have been opened, or openings for plantations made, mammals, birds, insects, and land shells, are sure to be seen, and sometimes in quantity. *Peccary* (a sort of wild pig), many species of monkeys, squirrels, rats, other animals are seen feeding on the maize. In fact, they are a pest to the Indians, who kill them whenever they have a chance.

Many birds are also seen feeding on the maize, conspicuous among them, are the macaws and parrots, tanagers, sparrows, and others. On the trees bordering the openings, toucans and caciques are also abundant. The *Caciques* (*Cassicus*) are very numerous, and live in society. They select one or two of the highest trees and form a sort of cacique's rookery, hanging their long purse-shaped nests close to one another, the whole of which makes a curious sight. I think that this habit of uniting together at the breeding season has for its object the safety of the young. These birds, having the custom of assembling together, fight bravely and pursue any intruder approaching their nests.

In the roads and foot-paths, insects of all descriptions are met with, but the most conspicuous are the butterflies belonging to the families *Heliconidae*, *Papilionidae*, and *Morphidae*. The family *Heliconidae*, which contains a large number of genera and species, is peculiar to the warm countries of America. These butterflies are very abundant. Some have long black narrow wings, spotted with crimson, green or yellow; others are yellow and black; others have

transparent wings. Their elegant shape, showy colours, and their slow way of flying, form quite a special feature of the tropical forests. So also, the beautifully coloured Morphos, the largest diurnal butterflies of America. The larger species are about five inches wide, all of them brilliantly coloured black and blue, sky blue all over, or opaline blue, so brilliant that when lighted by the sun, their appearance is dazzling, surpassing in beauty all other living animals. They have also a slow way of flying, and they are as easily caught as the *Heliconi*, but they are uncommon.

One of the peculiarities attributed to the *Heliconi* is that they are no food for birds. Why? I have not been able to ascertain; but the fact remains that birds do not touch them, contrary to their usual habit with all other species, of which they are very fond. The consequence is that other butterflies, especially *Papilios*, are met with, resembling so much to *Heliconi* in shape, colour, and other respects, that it is supposed to serve them as a protection for life.

Another interesting observation which I have made with respect to the *Heliconi* is that various coloured varieties of one and the same species are always met with typical specimens. These may suddenly disappear and are replaced by a large quantity of one of the varieties.

Years after, this variety may disappear also and be replaced by another variety. The deduction to be inferred from this is that when a species is represented by a large quantity of specimens, Nature produces the same changes that mankind have done with several domesticated animals, such as fowls, pigeons, dogs, horses, cattle, etc.

Therefore it tends to prove that Nature is always at work, and making continual changes in what we call species. Some disappear and are replaced by new ones. It has been always the same from the beginning of the world, and will continue so to the end.

Now-a-days we know with certainty that emigration or transportation of animals and plants from one climate to another, in the course of more or less time, will modify their forms and their colours, for better or for worse, to such a degree that they will be hardly recognisable. This is partly due to the climate, and partly to change of food.

On the 15th of December, I left San Juan, and with several others, I started for *la Virgen* (the Virgin), the new station built on the banks of the Lake of Nicaragua, where small steamers wait for the passengers crossing the Isthmus.

It is a ride of about twelve miles. It was the first time that I rode. At first I enjoyed it immensely, but before arriving at la Virgen, I was excessively tired and bruised. The road undulated amongst hills, and was very bad, but quite picturesque all the time and in the midst of primeval forests. If I had been a better rider it would have been a grand treat. We were six hours on the road, from San Juan to *la Virgen*. This route had a very bad reputation. Robberies and murders were frequent. We saw the blood of a stranger murdered a few days before, and we also met with some bad looking faces on the road, but we reached the station safely at half-past five p.m. We went to the American hotel, a new wood building, where we took our quarters for the night; but before dinner we went to see the celebrated *Lake of Nicaragua*.

Nothing finer can be seen. This magnificent lake, one of the largest in Central America, is 150 miles long and 90 miles broad, with many islands, two of them, the largest, *Ometepeque*, and *Madera*, stand opposite la Virgen. On these islands, which have a circumference of about 24 miles, are two high mountains, 5,100 and 4,000 feet in height, which present an imposing aspect. From la Virgen they are distinctly visible, from their base to their summit, and they appear with more effect than many other larger mountains that I have visited. This is due to their position in the middle of the lake. They overlook all the surrounding country.

The islands of Ometepeque and Madera are inhabited. Several villages of Indians exist there. The inhabitants cultivate large plantations of *bananas* (plantains), Cacao and Coconut trees, vegetables, etc. The fertility of the soil is remarkable in some parts. Three harvests of maize are gathered yearly.

The population of these islands descends from the Aztecs or Mexicans, and is exclusively Indian. A few white men have inhabited these islands at different times. They were chiefly German. The family of the first was murdered, and his house burned, and shortly after he was also murdered. Another German who had properties on the islands abandoned them, and went to live at Granada. A third one was more successful, and was much respected by the Indians.

Many antiquities exist on these islands, and the Indians still worship their idols. Animal life is plentiful, and fishes are abundant in the lake.

On the 16th of December, I took passage in a small

schooner, and after fourteen hours' navigation we arrived opposite the landing place of *Granada*. In consequence of a high wind the waves were rather agitated, and some of the passengers were sea-sick during the voyage.

CHAPTER X.

Granada—The French Consul, M. Rouhaud—Nicaragua in 1852-1853—Intermittent Fevers—How to Cure Them—Natural History of Nicaragua — Remarkable Animals found in Nicaragua — Howling Monkey—Humming Birds—Manakins—Rare Insects peculiar to Nicaragua—Vegetable Kingdom—Cacao and Siphonia Trees—Commerce—Mines—Climate — Volcanoes—Rivers—Lakes—Principal Towns—Population.

GRANADA.

GRANADA is a fine town, the principal of the Republic of Nicaragua. It is situated at about one mile and a half from the lake.

Not knowing where to go, I went to the house of the French consul, M. Rouhaud, who received me most hospitably. I remained eight days in his comfortable house, and during all the time M. Rouhaud and his charming wife were kindness itself, and I shall always remember with pleasure the time spent in their agreeable society.

I had caught the fever on my way, from San Juan to la Virgen, and I suffered greatly from it, but thanks to the excellent attendance bestowed on me, by Madam Rouhaud, it soon passed away.

The intermittent fevers, which are one of the drawbacks of tropical countries, are not very dangerous if properly attended, but are very troublesome. During the rainy season, which usually lasts from the end of May to December, the least imprudence is dangerous; but the worst of them is getting wet through. Fever is sure to follow. The first sensation is that of feeling extremely cold. It lasts for one or two hours, then the reaction comes and you feel feverish. This lasts until abundant perspiration is produced, then the fever gradually disappears, and does not come again until the second or third day at about the same hour. Usually it comes every two days. After an attack of fever, you lose your complexion and take the usual yellowish colour peculiar to the inhabitants of tropical countries.

The best remedy I know for combating this malady, and which has always proved successful with me, is the following:— The day after the first attack, take a medicine, castor oil or seidlitz powder, and immediately after, when the medicine has produced its effect, about 12 grains of sulphate of quinine in three times, several hours before the next attack of fever, so as to take the last dose one hour before the attack.

On that day the fever is more strongly felt, but one need not be afraid of that, as it is the effect of the quinine absorbed. Eight grains are taken in the same manner before the third attack, which is already less. Six grains are again taken before the fourth visitation, which is usually so feeble that it can be considered as gone. You continue to take four grains when the fifth attack ought to have come, but it seldom comes at all, and lastly you take the two remaining grains two days later. In all 32 grains.

If you have been careful to commit no imprudence meanwhile, and kept a sort of semi-diet, the fever is gone for good.

If you like you may continue for a time, say for about two or three weeks, to take one grain every day, this will be quite sufficient to keep the fever away. But it is prudent not to expose oneself to the rain, or else the fever will come again with certainty. The usual things to avoid in tropical countries are—rain, sun, fruits, and spirits.

Americans usually take 32 grains of quinine at one gulp. Truly in some cases, the fever disappears almost immediately, but it produces such an irritation to the intestines that the remedy is worse than the malady. Besides the recovery is not so certain as with my method.

By taking one grain of quinine every day, from the day of your arrival in the tropics, you may escape altogether the infection.

The quinine may be taken in two different ways. The first is to dissolve 32 or more grains of quinine in a bottle of orange, claret, or sherry wines, as many grains as the bottle contains of small liquor glasses, so as to keep the proportion of one grain of quinine for each glass, taking care to shake the bottle each time that you make use of it.

The second method, that which I have always used, is to weigh 32 grains of quinine, and to put it in a saucer with about the same quantity of flour. In the middle of it, pour six or eight drops of water, and with a knife, mix the whole gradually and well until it has the firmness of paste,

work it well with your fingers and extend it in length as macaroni paste, then divide it in 32 small pieces, which you detach separately and roll between your fingers, making them into pills. Each pill will contain about one grain of quinine, and will be easily swallowed, the flour having taken away a great part of the bitterness.

Taken with wine it is a preventive, one glass being taken every day before breakfast. The pills are better fit for curative purposes.

Kind Mr. Rouhaud found a house for me, where I made myself at home. I took a female cook at a cost of ten shillings monthly, with board and lodging. I remained in Grenada from the 16th of December, 1852, to the end of May, 1853.

Grenada, as I said before, is the most important city of Nicaragua. It lies on the north west of the lake. In 1852 its population was about 15,000. Like all the Spanish cities it was built in squares, the streets crossing each other at right angles. The houses are usually one story high, very few have a first floor. This is chiefly due to the frequent earthquakes. All the rooms are on the ground floor. They are large and the ceilings high. All of them look on a *patio* (yard), in the middle of which it is not unusual to see a fountain. In the best ones, covered galleries surround the *patio*, and are used as reception rooms during the summer. In fact it is more agreeable to sit and work there than inside the rooms which are badly lighted. On the wall supporting the galleries it is the custom to have all sorts of flowering plants placed upon it, which give a charming aspect to that part of the house.

The rooms fronting the street have large, low windows, enclosed with iron railings, which are sometimes beautifully carved, and which gives them the appearance of gaols. In the afternoon and at night, it is the custom to stand or sit inside these windows, and to converse with the friends passing by in the street. When they have a first floor, there is also a gallery above surrounding the patio, and balconies facing the streets.

During my stay, I remarked, that many of the best houses were in a very bad condition, some completely ruined. Few were the monuments, several churches more or less damaged, the municipal Palace, the gaol built much the same as the private houses, so that it is quite easy to speak with the prisoners from the outside, several hotels, and

the remainder shops or private houses. Living was cheap and regular. In the American hotel, which was a large building, the fare was six shillings daily, for board and lodging. In the French hotel four shillings. Besides these, they were *mesons* (native inns) where you could rent one room for one shilling a day, getting your food where you liked. Meat, fish, pork, fowls and eggs were always plentiful in the market, where you could buy also many sorts of vegetables and fruits, brought over by Indians from the interior. Plantains were very abundant and cheap. For sixpence you could buy an entire bunch containing from 60 to 100 fruits. Many sorts were seen, Guinea, Manilla, Santo Domingo, and others, but the most abundant were *Platanos machos* (Male Plantains) a very large one, eaten by all, instead of tortillas of maize, or bread. This last commodity could be had good and at a fair price.

In Nicaragua, the plantain is the most important article of food. It is eaten raw, baked, roasted, or made into sweets.

At first it is well liked, but it would never be supposed that the time would come when you could scarcely do without them, but it is a fact. The more you eat them, the more you like them. Excepting the large ones, all the other sorts are eaten raw, or made into sweets, but it is dangerous to eat too many. It is said that they contribute to engender fevers. I do not know how far this is true.

The *platanos machos* is eaten green, or half ripe, or quite ripe. In this last stage it is good, but not so much as the smaller sorts. Fried it is delicious. When green, they are boiled and have a very unsavoury taste, but they are farinaceous and replace bread advantageously. The natives usually eat them so. Half ripe they are roasted upon hot cinders, and they are exquisite, when well done. They are then slightly sweet and farinaceous. I was never tired of them, when prepared in this manner. Boiled, one is enough for one meal. Roasted, two are the utmost which you can eat.

The plantain belongs to the family of the *Musaceae*. It is found in all tropical countries. These plants have scarcely any aerial stem, but shoots from subterraneous root stocks, from which emerge stems composed of sheathing leaf stalks. The leaves are flat and traversed throughout by a thick median rib, with simple veins running directly towards it from the margin. The general aspect of the plant is somewhat like that of a palm tree. The genus, *Musa*, is the type of the family.

The *Platano macho* (*Musa sapientum*), is the largest of the species. It has a fruit which grows sometimes to the length of twelve inches or more. Each plant produces a bunch containing from twenty to sixty fruits closely grouped together. It weighs from thirty to one hundred pounds.

Another common species is *Musa paradisiaca*, so called from an allusion to an old notion of being the forbidden fruit of Scripture.

The fruits of this species are small, only about three inches long. When ripe, they are very delicate eating.

Many other species are known, and all of them are used for food. All animals are fond of them. When over ripe, I have seen hundreds of beetles and butterflies feeding upon them, and some of the rarest species which I have collected were caught when feeding upon these fruits. I believe the fermented juice of the over ripe fruits intoxicate them, as I have always seen them more or less stupefied when feeding on plantains, to the point of allowing one to catch them easily with the hand. During the last few years, a large trade in these fruits has developed between the United States and the Atlantic ports of America and West Indies. In 1892, in the months of August and September, seventy-eight thousand tons have been imported to the United States, the result of which has been, that the culture of this fruit is increasing to a remarkable degree.

A good many tons have also been imported to several parts of Europe, especially to England, but it is quite insignificant compared with the importations to the United States.

It is the most nutritious and the most prolific of all known plants. It requires very little labour, and a mere patch of ground, say of one hundred yards square, will suffice to sustain a whole family. Not only the fruit, but every part of the plant is useful. The leaves make a good shelter, and are employed by the Indians to cover their huts; and its fibres can compete with the best qualities of cotton or flax.

Lately, a very good quality of paper has been made with the fibres, and at a very small cost. The supply of this material being unlimited, it is probable that it will greatly reduce the cost of paper. The sap of the stem and the skin enveloping the fruit contain a very strong acid, which blackens hands and clothes, and is not easily disposed of. I believe that no one has ever studied its properties, but it is probable that a good ink can be obtained from it, and no doubt many other uses will be found for it.

An intoxicating liquor is made with the fruit. It is rather pleasant and has a peculiar taste.

Sugar can be extracted from the fruit.

I have also seen parcels of dried fruits sent to Europe, and we had a fair sample of them in the Guatemala Pavilion, at the Paris International Exhibition of 1889; but it was not much appreciated by the Visitors.

With a little care, the plants may be made to bear fruits all the year round, and it is estimated that an acre planted with bananas will produce forty times more in weight than potatoes, and one hundred and thirty times more than wheat. It has also been calculated that the produce of one acre, planted in *bananas*, will yield a yearly income of four thousand pounds sterling.

It is very easy to set out a plantation of bananas. The stems are annual and usually die after the exhaustive process of fruiting has been completed, new ones being produced from the root-stock. It is by planting these buds that the banana is propagated, and a new plantation made. These stems being numerous round the dead plant, the task is easy. In about ten months, the new plants will bear fruit. It requires scarcely any work at all in the way of weeding, these plants being so perennial that they do not leave room for any other plants to grow between them.

To the fertility and large productive power of these plants is partly due the laziness of the Negroes and Indians inhabiting the tropical countries of America, and this is more especially seen in Nicaragua, where these fruits are the principal food of the inhabitants.

To that fact, I have attributed the difficulty I experienced in getting men to help me in my researches. As soon as they had earned a few shillings, it was quite impossible to make them work. So long as they had a little money for drink, they lazily remained for hours and days' warming themselves in the sun, like lizards, or bathing in the lake for hours at a time.

From the town to the lake, the route was always crowded with people, some going, others returning. In fact it was a curious and interesting sight to see these people bathing, both sexes together. It is true that a bath in the lake was delightful, and I enjoyed many; but I never remained in the water for hours as the natives did.

They were not at all afraid of crocodiles, which were abundant at certain places, and which from time to time

caught one of the legs or arms of the bathers to feed with. It is true that these casualties were rare, but nevertheless it occurred several times during my stay in Granada. When it occurred, they frightened the animal with their discordant cries, and several times the monster was caught, and paid the penalty of death for its audacity.

I believe that the Indians of Nicaragua are as much at home in the water as on land. They are truly amphibious. From the time of their birth, we may say that they go in the water, and when they are full grown, it seems to be their natural element. They swim splendidly.

At the beginning of March birds appeared in large quantities, and I made some fine hunting expeditions in the neighbouring primeval forests bordering the lake. In one of them, I killed a fine specimen of the Howling monkey (*Mycetes palliatus*). Their native name is *Congo*, probably in honour of their black colour, alike that of the inhabitants of that African country. Two species of this genus are known, one peculiar to South America, and this one peculiar to Central America. They are the largest American species known, measuring about four feet, exclusive of the tail. They are remarkable for the great development of the organ of their voice, which consists of a peculiar kind of bony drum, formed by a convexity of the hybridal bones and communicating with the larynx. The noise produced by these howlers, at day-break, at sun-set, and sometimes during the night, is perfectly appalling. It is more like the roaring of jaguars than any thing else. I was a long time before ascertaining that such an infernal noise was produced by this monkey. Many are the nights which I passed sleeplessly, when encamped in the forest, fearing an attack of jaguars or other ferocious animals, and all this, due to the vociferous cries of these monkeys.

It was a great satisfaction to me when I discovered it, because these animals are quite harmless, and I cannot conceive what can be the meaning of their noisy howls.

They are sociable animals, and live in troops in the deep forests. As many as forty of them are sometimes seen together. They are fond of their offspring, and very active, and it is a grand sight to see a troop of these monkeys running away with their young, firmly attached to their backs, or gambolling among the creepers. The male is rather dangerous to approach when wounded, but it never attacks man.

They are great enemies of the Indians in consequence of

their devastating propensities. Scarcely are maize or fruit ripe when these monkeys invade the plantations and carry away the ears of maize or the fruit. Unfortunately for the owners it is very difficult to surprise and kill them as they leave scouts all round during their plundering expeditions, and when the Indians arrive on the scene, not one is to be seen. It is only by surprise that they can be killed.

Although I was very fond of eating the flesh of most of the mammals and birds which I killed in my expeditions, I did not taste that of this animal, so I cannot say what it is like, but I have been told that the Indians and hunters consider it a great delicacy, roasted.

I also procured some other species of monkeys, but they were very small. One of them, a sort of *Ouistiti* (Jacalus), was a very pretty creature, and is often domesticated.

Among the birds, one called *Mot-mot* (*Eumonota superciliaris*), was very abundant, and I secured many specimens. Its native name, *Mot-mot*, comes from its cry, which sounds exactly as the pronunciation of that word in a deep, low voice, and which it repeats frequently, when perched in the interior of the forest, one of its peculiar habits. Sometimes it will remain for hours on the same branch repeating now and then its curious cry, and at the same time moving its tail up and down. The two central feathers of the tail are very long and bare in the middle, terminating with a sort of round spot similar to an eye. They are quite visible when he moves its tail. It is said that the bird itself, with its bill, lays bare that part of the median feathers by plucking one by one the feathers of the quill, so as to make it more ornamental. It is possible, but I am not certain, that it has been proved. It is true that in the young birds these feathers, excepting in their length, are like the others, and do not show any bare place; but this may be produced by some other means than by the plucking of them.

It would be necessary to know how and where they nest, a fact which I have never been able to find out, but which would throw some light on the matter, if what I have been told is true, that they nest in the cavities of trees and holes in the ground, where they may lose their quill feathers in entering and getting out of their nests. I say this because I have killed many specimens which not only had the middle, but also the extremity of the quill, bare of feathers and very much worn.

These birds are always seen in pairs; but several pairs

may be seen at a very short distance from each other. It is a very pretty bird, grass olive-green above, the tail feathers blue with black shafts and tips, the two central produced into a long bare shaft with a broad blue racket, the terminal half black. The crown is grass-green with a broad superciliary band commencing at the base of the nostril, first silvery white, shading into silvery cobalt, the lores and ear coverts black as well as the feathers below the eye, the latter spangled with a few silvery blue spots. The undersurface is olive yellowish-green, becoming grass-green on the fore neck and breast.

The centre of throat is black, forming a broad streak, bordered by a band of elongated blue-silvery feathers, the sides of the body, abdomen, undertail and wing-coverts are ferruginous. Many species are known, all from America. They are all coloured more or less alike.

They belong to the order COCCYGES, sub-order *Anisodactylæ*, and family *Momotidæ*. They are characterized by having a long, strong and thick bill, a little compressed, laterally inflated at the point, and having the edges crenulated. Their tongue is long, narrow, and barbed on the edges, the wings are short, and their tails have always the two central feathers two or three times longer than the others.

They are sometimes called *Bobo*, or Simpleton, by the natives, because they are very familiar, the presence of man does not frighten them, and are easily caught. They are about the size of a starling, and have strong feet. The egg is round and pure white.

Another species, *Momotus Lessoni*, is also found in Nicaragua. It is slightly larger, but not so brilliantly coloured. Another beautiful bird, also abundant in Nicaragua, was the Long-tailed Manakin, (*Chiroxyphia linearis*.) It is a charming little creature, adorned with the most brilliant colours, red, blue, and black, with two very long and narrow central tail feathers.

These beautiful birds belong to the PASSERES, sub-order *Oligomyodæ*, and family *Pipridæ*. About 70 species are known, all of them from America. They are about the size of a canary, and have a very short bill, slender feet, short wings and very short tails in general, but in the genus *Chiroxyphia* all the species have two very long and narrow central tail feathers, but this peculiarity exists only in the males. It inhabits small woods, is very active, has a short

flight, and utters a sharp piping note. They live in pairs, but many pairs may be seen at a short distance from each other. They feed on insects.

Some species of Pipridæ make a great deal of noise with their wings, when flying from one branch to another, but I never heard it from this species.

Among the other remarkable species of birds met with in Nicaragua, I shall mention several species of Tanagers, among which, *Ramphocelus passerini* and *icterontus*, several species of *Calandra* (Icterus) remarkable for their long purse shaped nests, built near one another at the top of high trees. These birds usually yellow and black, are very fond of plantains. The curious Fly-catchers (*Milvulus tyrannus* and *forficatus*), two fine species with long tails, always found in the *savannas* (plains) chasing all sorts of insects, and having the habit of selecting a special branch as a post of observation, to which they always return. Two species of Jacamar, *Galbula melanogenia*, and *Jacamerops grandis*, two very fine birds, metallic golden-green, chiefly seen singly, in the small forests; several species of Trogons, also brilliantly coloured, metallic golden-green above and on the neck and breast, with the rest of the under-surface usually crimson or yellow, several species of *Pico Canoas*, or Toucans. The native name is derived from the form of its brilliantly coloured bill, which is extremely large, each mandible having somewhat the shape of a *canoa* (boat.)

They are remarkable birds, and only found in America. They belong to the family of *Ramphastidæ*, and about sixty species are known. The true *Ramphastos* are the largest and most brilliantly coloured, with patches of bright yellow and crimson on the breast. They are much killed for the sake of these bright feathers, which are greatly prized by some Indians, who make curious head-dresses with them. The yellow feathers are also much used in England for the manufacture of flies, for trout and salmon fishing.

Although their bill is very large compared to the size of the birds, it is in reality very light, its interior consisting of a maze of delicate cells, throughout which, the ramifications of the olfactory nerves are multitudinously distributed. The use of this extraordinary bill is not satisfactorily known. Their long, slender, pointed tongues are horny, and fringed or feathered on each side. The tail is peculiar for the facility with which it can be turned up, so as to lie on the back.

They have a short flight, and hop and flit from branch to branch with graceful ease. They live in families, and build their nests in the hollows of trees.

They feed chiefly on fruit, and it is very amusing to see how they seize and swallow them. First they lay hold of the fruit with the extremity of their long bill, then they throw it upwards into the air, catch it in their open bill and swallow it. When searching for fruit, they have the habit of placing sentinels in different parts, and if there is any cause of alarm, they begin to scream in such a noisy way that they are heard miles off.

I also collected several species of Humming Birds, *Pyrrhophæna cyanura*, *Lampornis prevosti*, *Sancerottia sophiæ*, and *Chrysuronia eliciae*. This last species was only found in the forests. It is a beautiful bird, with a blue throat and the tail entirely metallic golden.

In Insects, I collected many species of butterflies and moths, some of which were very fine. My principal hunting grounds were the *Barrancas*, deep narrow ravines which surround the town, and which are rather dangerous at times, because they are used by the natives for conveying cattle from one place to another. The sides of these ravines being very steep in places, it was not always an easy matter to find a place of shelter until the cattle had passed. Otherwise they were delightful, cool, and green, the sides being covered with small trees, bushes, and plants of all descriptions. These ravines are sometimes many miles long, and many were the species of *Papilios*, *Morphos*, *Heliconi* and others, which I caught there.

Another good collecting ground was on the road from Granada to the lake, or on the margin of the last. In the dry season, at all wet spots on the road, or on the margin of the lake, hundreds of species of butterflies used to assemble together to drink. They were scrambling one upon another, and it was an easy task to gather as many as one choose, or even to select the species wanted, as they never fled away. Every wet spot was invaded by hundreds of them, which took no notice of the collector. It was an extraordinary sight indeed to see these patches where all colours imaginable were mixed together.

Lastly, I collected some rare and fine species in the *hacienda* (farm) of the French Consul, my friend Mr. Rouhaud, now known, as *Valle Menier*, the property of the celebrated Parisian chocolale manufacturers.

In that hacienda, there were large plantations of cacao trees and plantains. On the ripe fruit of the last plants, and on the mangoes, I collected many fine and rare species of insects.

It was delightful to ramble about the plantations of this fine property. All kinds of fruit-trees were to be seen, *Orange, Lemon, Mango, Plantain*, several species of *Sapote* and others, but the most interesting was the *Cacao trec* (*Theobroma*), or God-food. The Cacao tree (*Theobroma cacao*), belongs to the genus of dicotyledonous plants of the order BYTHNERIACEAE. The tree somewhat resembles the cherry, and is found in all tropical America, and has been imported to other countries. Several species are known.

The fruit is contained in a ligneous casing, usually five to eight inches long, and of a bright yellow or scarlet colour, when fresh and ripe. It turns to a dark brown after being cut. The seeds are about the size of a large bean, rufous and enveloped in a pulp of the consistence of butter. Dried they are, consumed in the country or sent to Europe for the manufacture of the well-known chocolate. It is one of the principal articles of exportation of America. The well-known Parisian firm of Menier consumes daily 40,000 pound which means a yearly average of FOURTEEN MILLIONS OF POUNDS!! Its actual value being about two shillings per pounds, it represents the enormous total of *one million, four hundred, and forty-four thousand pounds sterling!* And yet four hundred years ago, it was quite unknown to Europeans. Long before the discovery of America by Columbus, the Indians cultivated the trees which produce this fruit.

Mexican tradition mentions *Quetzalcoatl* as the introducer of the tree in that country, from where it was successively exported to Central and South America.

The tree was called by the Mexicans *Cacaboquaitl* and the fruit *Cacahoatl*. With the seeds they made a beverage called *Chocolatl* from which the name of Chocolate is derived.

This beverage was universally used by the Mexicans, but the best sorts of seeds were reserved for their kings, princes, and celebrated warriors. In many countries, the seeds were, and are still, the current money, and are received in payment for other commodities. In Mexico the taxes were usually paid with these seeds, and it has been written that when Fernand Cortez entered that city, he found in one storehouse, forty thousand large baskets of cacao seeds.

For a long time, the Spaniards did nothing with them, and even in Spain, up to 1728, it was scarcely known.

In 1728, Philippe V. sold the monopoly of that commerce to a company of Spanish merchants, with the faculty to ship for Vera Cruz (Mexico) all the seeds which could not be imported to Spain.

After this, Cacao was imported to Italy and in France, but in the last country its use was very limited until the marriage of Louis XIII. with Anne of Austria. The Spanish Infanta was very fond of chocolate, and continued to have it at breakfast. Soon after this, all the Court ladies copied her, and enjoyed this beverage.

During the reign of Louis XIV., its use had made such progress that this King, in 1692, gave the monopoly of its sale to one of his favourites. A tax of about seven pence per pound was imposed on all seeds imported, and the price of chocolate was fixed at six francs per pound, a little less than four shillings and tenpence.

Under the reign of Louis XV. the custom of drinking chocolate progressed considerably, and the annual consumption reached the large total of 300,000 pounds; but this is nothing compared to the quantity manufactured by the first French Company, which made use of steam engines, for the first time.

About 1820, this company required annually about six millions of pounds of cacao-seeds, and manufactured twenty millions of pounds of chocolate, which is still nothing, compared with the quantity required for the actual fabrication of that commodity.

Now large plantations of cacao trees exist, not only in all the tropical countries of America, but also in Java, and many other Asiatic countries. The countries which produce the best qualities are *Soconusco*, and several other places in the Department of Oaxaca (Mexico), *Mazatenango*, and other places in the Department of Juchitepec (Guatemala), *Granada* in *Nicaragua*, *Caracas* in Venezuela, and many other places in South America; but the large plantations near Guayaquil, in Ecuador, produce more than any other, but the quality is much inferior. The seeds are larger, more flattened, and blackish; meanwhile those of the other countries mentioned, are smaller, somewhat rounded, and of a beautiful pale rufous colour.

The Guayaquil, as it is commercially called, has less value; but, nevertheless, it is bought in large quantities in America and in Europe for mixing with the other qualities.

The usual height of the Cacao tree is from twenty to thirty

yards, and sometimes more. It is always green, the lanceolated leaves are smooth, about eight to twelve inches long, of a dark green colour, and attached to the branches by large petioles. The flowers, which are small and abundant, appear on the trunk and branches. Many of them fall to the ground, and the few which are productive are soon replaced by green rounded fruits, which lengthen as they ripen, and become brownish red. The capsule is divided internally in five cells, containing from twenty-five to forty seeds, enveloped in a rosy pulp acid, agreeable to eat, when the fruit is ripe.

The best ground for a plantation of Cacao trees is the virgin soil of the tropical forests, in warm and moist climates, never higher than 2,000 yards above the sea; the lower the altitude, the better it is. It requires to be well sheltered, and to obtain this, openings are made in the primeval forests, leaving high trees at intervals of about twenty-five to thirty feet apart, to shelter the Cacao trees.

The nurseries, like those for the coffee trees, are also made under the shelter of large trees, which completely shelter the young plants from the rays of the sun.

A selection is made of the best seeds, and these are placed, one by one, in furrows, two inches deep, covered with a light bed of earth, on which plantain leaves are spread. Two weeks after, these leaves are removed with great care, the seeds have germinated, and it is important to pull up as often as necessary all weeds, so as to keep the young plants always free of them. In three or four months the plants are about one yard high. Then it is time to transplant them. This delicate operation is done by special workmen. One of them raises the young plant with the greatest precaution with a good ball of earth around the roots, another transfers it at once to the hole prepared beforehand for that purpose, and a third one buries it with care, keeping the stem upright, and filling up the hole. A distance of twelve to fifteen feet is required between each plant. When the plantation cannot be made in the forest, it is important to prepare several years before, a piece of ground in which, orange, lemon, plantain, or other suitable trees have been planted from distance to distance to shelter the cacao plants.

Water is also indispensable to engender the necessary humidity. For that purpose many canals are dug up in the plantations. With a thick hedge to protect the plants from the animals, the work is concluded. It only remains to keep away the weeds, and to replace the dead plants if there are

any. Two years after flowers begin to appear, but it is only in the fourth or fifth year that the first gathering is made. If well cared for, the trees will bear fruit during twenty-five to thirty years, and every day, a harvest will be reaped.

Besides these every-day harvests, there are two principal ones, from November to January, and from May to July. This last one is the best, because it takes place at a good time of the year; the fruits are larger, weigh more, and the quality of the seeds is better.

The fruits are heaped under sheds for two or three days, then broken, and the seeds taken out and deposited in closed rooms where they remain two or three days, or less, then they are dried in the sun for one day. They are stored again, and soon they begin to ferment, and a large quantity of sugar exudes from them.

This fermentation is a very important operation. If it is carried out properly, the cacao will be of superior quality. It lasts from two to five days, then it is dried again in the sun or in heated drying rooms. When well dried, it is put into bags and ready for use.

A very good method for drying coffee, or cacao, is to build a moveable roof, on wheels, permitting the seeds to be covered or uncovered as necessary.

Among the enemies of the Cacao plant are the ants and the *Coccidae*, or Mealy bugs. The ants destroy the leaves, but at the same time also destroy the bugs. The monkeys, squirrels, parrots and other birds and animals, fond of the fruits are also the enemies of these plants. If proper care is not taken at the time of the gatherings, in a few hours they will be destroyed by these animals.

From the seeds, in late years, an alcoholic essence, named *Caféine*, has been extracted. It is said that it possesses the same properties as the *Coca* from Peru, and that life can be maintained for many days without any other food. One fact is certain that it acts considerably on the nervous system, and that under its influence, man is able to do a greater amount of work than otherwise. Cocoa butter is also extracted from the seeds. In fact they contain about 52^o/_o of it. It is much employed as a medicine, or in the manufacture of refined soaps, oils, &c. Naturally it could also be made into candles. As a medicine, it is efficacious against chaps, chilblains, and the like. I think that it can also be effectually used as ointment for sore throats and colds. At least I have tried it successfully on myself.

Actually, 25% of this oily substance is extracted from the seeds and sold for certain purposes. It is considered that chocolate containing as little as possible of this oil is more wholesome and agrees better with debilitated delicate constitutions. The different sorts of cacao are commercially known as Caracas, Maracaibo, Guayaquil, Trinidad, Marañon, Para, Cayenne and Cacao of the Islands, according to the country where they come from. Under the last named category are known the Cacaos, grown in the Antillae. In 1889, at the Paris International Exhibition, I saw some samples of a very good cacao from Java; but it was scarcely known in the trade.

Besides these sorts, there is in Mexico a superior quality of cacao known as *Sacomusco*, from the province where it grows, but it is very scarce and is not raised in sufficient quantity to supply the Mexican markets. When I visited that country, the usual price of this Cacao was four shillings per pound.

To make a good chocolate, cacao and sugar are all that are wanted. Sometimes a small quantity of cinnamon bark, reduced to powder, or vanilla is added to give it flavour, but many add flour and other farinaceous powders. These additions augment the quantity, but spoil the quality.

In Nicaragua the chocolate is done on your own premises. There are women specialists, who never do anything else. For about one shilling, or one shilling and sixpence, and food, one of these women will make from five to ten pounds of chocolate in one day.

You give them two pounds of sugar to every pound of cacao. First of all, they slightly burn the almonds on a slow fire, then they take off the skin and bruise them on the same stone which they use for the bruising of maize, when making *tortillas*. This stone is called *metate*. It is made of a porous granitic stone, about half a yard long and from twelve to sixteen inches wide, bent upwards at the extremities and supported on four low legs carved in the stone. With this goes the *mano* (hand) of the same width as the metate, or slightly longer, made of the same stone and rounded. With it, they bruise the seeds on the metate, until it is quite liquid, then little by little, they mix the sugar, bruising all the time until the whole is well mixed together and has acquired the consistence of paste. Then they add the cinnamon or vanilla, and with their hands roll the paste in pieces of a certain length, cut it in small round pieces and let them dry. It is hard work, but the result is very satisfactory. Each

piece makes a small cup of splendid rich chocolate, costing about one penny.

Very good chocolate can also be made by mixing several sorts together, but it is very important to reject all the rotten seeds.

Pure chocolate is considered as one of the most nutritive and wholesome foods. With bread and chocolate alone, life can be sustained for a long while, or for ever. Its aromatic principles stimulate the most debilitated or delicate temperaments without tiring them. It is easily digested and suits everyone. It is more nourishing and less exciting than coffee or tea. It has the property of fattening those who drink much of it.

In Mexico, Central and South America, as well as in Spain and Portugal, it is usually drunk pure. Before serving it, they bring the froth to the top by placing in the pot what they call the *molinillo*, a wooden instrument, like a wheel attached to a long stick, and twisting it round with rapidity.

In America, chocolate replaces the tea of the Chinese and Japanese. The first things which are always brought to visitors, at any time of the day or night, are cups of chocolate and cigarettes. This reminds me of a good story of an incident which occurred in one of the *mesons*, or native inns. A German asked for something to eat. He was told that there was only chocolate in the house. So he asked for some. A little while after, they brought him a cup. The German took it and swallowed it in one draught, returned the cup, said it was very good and asked them to bring him some. Another cup was brought, and was drunk in the same manner. He asked again for some more. When the third cup was brought to him he was quite furious, and told the waitress to stop this mockery, that twice he had told her that he liked the drink very much, and to bring him a cup, instead of which they only brought him samples. Explanations followed, and it was with the greatest difficulty that they convinced him that chocolate was always served up in small cups, and that no one had tried to fool him. He was quite surprised when he had to pay about one shilling for what he had taken.

The German knew perfectly well what chocolate was, but he was accustomed to drink it with milk in his own country, where it is served in large bowls. It is the usual manner of taking chocolate in Europe, and it is also the best, pure chocolate being rather difficult of digestion for certain delicate constitutions, especially if taken in large quantity.

The Mexicans used to mix the cacao with different farinaceous substances, mixing a small quantity of capsicum with it; but the chocolate as it was made in the time of *Moctezuma* was very simple. They rasped the seeds and diluted the powder in boiling water. Sometimes they added to it an aromatic substance. It was also drunk cold as a refreshing beverage.

Indians have given me some, prepared in that manner, and with sugar, I have found it excellent. As everyone knows, it is much used for all sorts of creams, ices, sweets, &c., and there are few ladies, who are not fond of chocolate.

Some fermented drinks are also made with the pods, and the well-known drink Baravoise is also made with the seeds.

The Hacienda belonging to Monsieur Rouhaud, where I collected some of my best species of Insects, was partly planted with Cacao trees. Soon after my departure from Nicaragua it was sold to Mr. Menier, of Paris, and is known now as *Valle Menier*. It is the finest plantation of Cacao trees in Nicaragua. It provides occupation for thousands of people.

Another valuable tree, abundant in the primeval forests of Nicaragua, is the *Hule tree* or India-rubber tree (*Siphonia elastica*). It is a dicotyledonous plant, belonging to the order *Euphorbiaceae*.

This fine and valuable tree grows to a height of fifty to eighty feet. It is getting scarce, because at first they used to cut the trees to get the india-rubber; but now it is done on more scientific principles, and some intelligent persons have made plantations of these trees which are succeeding well. In the Paris International Exhibition of 1889, some fine samples of india-rubber were exhibited in the Nicaragua Pavilion. The exhibits of Messrs. Menier Brothers were remarkable.

The gathering of india-rubber is done by all the worst characters. All the runaways from Nicaragua and Costa Rica turn gatherers of india-rubber. They live for years in the primeval forests searching for these trees. When found, they climb upon them and make small incisions in the bark at a distance of several yards from each other. From these incisions, the sap or resin which is milky white, slowly comes out and drops to the foot of the tree, where it is gathered in due time. After a time it turns black, as sold in the European markets. The gatherers say that it is very hard work; nevertheless, they make a good living by it, the price of the resin rising gradually and constantly.

Several always associate together for the gathering of

the resin, and when they have a certain quantity they carry it in boats to San Juan del Norte, or *Greytown*, where it is easily disposed of. The annual exportation at the present time is worth about £40,000. All the forests bordering the banks of San Juan and San Carlos rivers are those where the india-rubber trees are abundant. One of their enemies is the well-known beetle, vulgarly called *Harlequin*, (*Acrocinus longimanus*,) a very large insect belonging to the family of Longicorns, or *Cerambycidæ*. It is about three to four inches long and one inch wide, with antennæ and legs five inches long. Its name, *Harlequin*, has been given to it in consequence of the colour of its elytræ, streaked with various colours, gray, black, and red being prominent. It feeds on the sap of the *Siphonia*, and deposits its eggs in the incisions made, to extract the gum. Later on, the larvæ bore for themselves great holes right through the stem. These larvæ boiled are considered as delicacies by the Indians.

So we see that Nicaragua produces three very important articles of commerce—plantains, cacao, and india-rubber, but this is not all. Very good coffee is also cultivated in that country. Vanilla is also found, and many are the cereals, fruits and vegetables grown. The principal are maize, beans, rice, capsicum, among cereals; orange, lemon, mango, sapote, guavas, among fruit-trees; and many sorts of vegetables, capsicum, tomato, radish, cabbage, potato, &c., &c.

To give an idea of the commerce done in that country in 1852, I submit the list of several goods exported from *Realejo* in that year.

Cedar, 20,000 square yards; *Mahogany*, 21,000 square yards; *Boards*, 71,764; *Brazil Wood*, 22,845 hundredweight; *Hides*, 12,870; *Cotton*, 1,000 hundredweight; *Maize*, 16,155 bags; *Rice*, 7,627 hundredweight; *Sugar*, 1,664 quintals; *Cigars*, 120,000; *Coyol Oil*, 615 gallons; *Honey*, 11,000 gallons; *Beans*, 100 quintals; *Lemons*, 50,000; *Eggs*, 600 dozen; and a quantity of mules, pigs, indigo, fruits, hammocks, shoes, and other manufactured articles, &c., &c. Besides cattle, horses and mules are reared in the plains, and many haciendas possess several thousand heads of them, which produce a good yearly income to their owners. They are exported to the neighbouring Republics, where they fetch a good price.

There are also rich mines of gold and silver. The principal are those of *Chontales*, on the Atlantic Coast. The late Mr. Thomas Belt, who published in 1874, a very interesting book

on that country, *The Naturalist in Nicaragua*, was the manager of the Chontales Gold Mines, and worked them successfully for several years. The Chontales Mines are situated nearly midway between the two oceans, at an altitude of about 2,000 feet. The gold is confined almost entirely to auriferous quartz lodes. The stones are crushed by machinery, and the gold extracted with quicksilver. It is not very rich in gold as a rule, but occasionally *bolsas* or patches of ore of great richness are found and pay well. About sixteen different veins were worked in 1874, by different companies.

The aspect of the country in the Chontales district is mountainous, intersected with valleys well timbered. The climate is hot and damp, as in Granada. The dry season is very short, scarcely four months, from February to May. But on the west side, it is quite different. The dry season lasts from November to May, almost without rain.

The sky is cloudless, the heat is less, the nights are cool, and the winds occasionally chilling. It is the healthiest season of the year.

The temperature of Nicaragua in general is equable. The extreme variation recorded at the head of the San Juan River was 23°. It rarely rises above 90° Fahr., or falls below 70° Fahr.

The consequence is that the products of Nicaragua are greatly varied in spite of the fact that the greater part of the country is not as yet entirely developed.

Animal life is very abundant and varied. During his stay in the country, Mr. Belt made a remarkable collection of beetles and butterflies containing many new species, especially in the family of Longicorns. One of the finest insects which he discovered of that family, was *Belt's Mallaspis*, (*Mallaspis belti*), which his friend Mr. Bates dedicated to him. It is about two inches long, varying greatly in colour from golden bronze to golden-green or golden-red. Many other fine and new species were collected by him.

He also succeeded in procuring the very rare and beautiful Humming-bird, *Microchera parvirostris*, described by the well-known American Ornithologist, Mr. Lawrence, from one single specimen found in Costa Rica. This beautiful creature, belonging to the group of *Snow Caps* of Gould, of which only two species are known, is about three times the size of a drone, dark rosy-purple all over, with the head snow white. It was unknown to European Ornithologists, and is still excessively rare. The fine male specimen which I have

in my collection, is one of the very few specimens collected by Mr. Belt.

Nicaragua, like nearly all the other Republics of Mexico, Central and South America, can be divided in three distinct zones, that of *tierras calientes* (hot countries), *tierras templadas* (temperate countries) and *tierras frias* (cold countries) according to their altitude above the sea. All the lowlands up to 1,000 feet, belong to the first zone, those from 1,000 to 3,000 feet, belong to the second zone and the remainder belongs to the third zone. Plantain, Cocoa, Palm, Siphonia, Cedar, Cotton and other trees and plants are found in the first zone. The best coffee is cultivated in the second zone, where the plantains, maize, beans, &c., also do well. In the third zone wheat, barley, vines and other European fruit trees are cultivated.

From the first to the third zone, the climate varies according to the altitude. In some parts of the country, in one day, you can pass from a tropical climate to that of a semi-arctic region. The higher you ascend, the healthier is the climate, but as a whole, excepting fevers, the climate of Nicaragua may be considered as healthy.

The principal rivers of Nicaragua are the *San Juan River*, which flows from the south-eastern extremity of the Lake of Nicaragua to *San Juan del Norte*, which course is very changeable. Since 1853, when I travelled the whole length of this river in a small American steamer, a large proportion of the water has been carried away by the Rio Colorado, which flows through the Costa Rica territory, and at the present moment, navigation for steamers is impracticable.

Many are the rivers flowing into the lake; but they are not of much consequence, the Rio Frio and Rio Acoyapo are the principals. Another large river, the source of which is not very far from Segovia, is Rio Escondido, which empties itself on the Atlantic, in the bay of Bluefields, the capital of the Mosquito Indians.

On the Pacific, there is a small river emptying in the Bay of Salinas, the place chosen by various engineers as the terminus of the Nicaragua Inter-oceanic Canal.

Two important lakes exist in the Republic of Nicaragua. The first and most important is the celebrated Lake of Nicaragua, with its many islands, standing at an elevation of 128 feet above the sea. The second is the Lake of Managua, close to the town of Managua, the actual capital of the

Republic. It is at a distance of about ten miles from the Lake of Nicaragua, with which, it communicates by the Tipitapa River. It is a fine lake also, but only about twenty miles in circumference. About ten miles from Granada there is another lake called Massaya, but it is very small. It looks like the mouth of an extinct crater, and probably it is one. It is enclosed on all sides with steepy rocky walls. Close by, lies the town of Massaya, with about 15,000 inhabitants, nearly all Indians. It is very large, each house having a garden attached to it. The streets have the appearance of a picturesque promenade among fruit trees. Their only supply of water is that of the lake close by, about 300 feet deep, from which they draw water, by means of buckets attached to long ropes. This lake is called in the country *Infierno de Massaya* (Hell of Massaya). All its surroundings are of volcanic origin, flanked on its western side by the active Volcano of Massaya, whose lava streams have covered the sides of the lake and all adjacent grounds.

From Massaya to Leon, a distance of 70 miles, nearly all of which consists of barren plains, is called the *Malpais*, or bad country. As many as fourteen distinct volcanoes are scattered from place to place in that short space.

At night the whole of it is lit up by bluish flames, flashing across the land or leaping like columns of fire, appearing and disappearing in succession. It is called by the Indians *el baile de los demonios*, or the devil's dance.

The principal towns of the Republic of Nicaragua are *Managua*, the actual capital of the Republic, 10,000 inhabitants; *Leon*, the capital, when I visited that country, 30,000 inhabitants; *Grenada*, 12,000 inhabitants; *Rivas*, south of Granada, at a short distance from the Lake of Nicaragua, 8,000 inhabitants; *Massaya*, already cited; *Segovia*, the capital of that district; *Matagalpa*, the capital of the district; *San Juan del Norte*, the principal port on the Atlantic; *Bluefields*, the capital of the Mosquito Indians; *San Juan del Sur*, one of the Pacific ports, and *Realejo*, close to the port of that name, on the Pacific.

The area of the Republic embraces 51,600 square miles. Its actual population exceeds 600,000 inhabitants, and in consequence of the variety and fertility of its soil and its admirable position, a great future can easily be predicted for that country.

CHAPTER XI.

HISTORY OF NICARAGUA.

History of Nicaragua—Its Discovery by the Spaniards—Their Expeditions—Gonzalez de Avila—Hernandez de Contreras—Wholesale Slaughter of the Natives—Oviedo—Pedro de Alvarado—History of the Independence of Central America—Morazan—Presidents of Nicaragua—Civil Wars—Expedition of Walker—Walker—His Fall and Execution in Honduras—The Mosquito Kingdom.

It is quite impossible to say, with any degree of certainty, which were the first inhabitants of that country, but there is no doubt that the Toltecs invaded that country in the sixth century, headed by their Cazic, *Nimaquiché*, and were probably the first who civilized the inhabitants of the western and southern parts of that territory. Afterwards the Aztecs replaced the Toltecs, and maintained communications with that country up to the time of the Conquest.

Before the invasion of that country, it is probable that several different nations inhabited Nicaragua, the principal being the Caribs, who certainly occupied, and still occupy, the coasts of the Atlantic Ocean. Nothing whatever was known of these people until the magnificent discoveries of Christopher Columbus.

The discovery of Nicaragua is attributed to Christopher Columbus, on his fourth and last voyage to America in the year 1503, and that he passed the place known now-a-days as *San Juan del Norte*, when he discovered the Cape named by him, *Gracias à Dios*, which name it bears to this day, and then coasted south to *Nombre de Dios*, the actual Chagres, north of Colon.

But there are some probabilities that Pedro Alfonso Niño had already visited that coast during his voyage to *Curiana* and *Paria* in 1500.

It is also probable that about the year 1514, Vasco Nuñez landed in that country, when Chief Governor of Uraba or Darien.

It is a fact that when Gonzalez de Avila embarked from Panama to the Gulf of Nicaya about the year 1522, the Pacific Ocean had been known to Nuñez for ten years at least.

In one of his expeditions in 1514, he came upon some high mountains which he ascended, and from its summit, he was the first who saw the two Oceans. Soon after he reached a large bay, which he called *San Miguel*. This bay was sprinkled with islands and treacherous rocks.

It lays south of Panama. From there, he made several expeditions of discovery, and found great treasures of gold and pearls, the last being very abundant. In the province of *Bononiama*, perhaps Panama? the Spaniards enriched themselves with chains and breastplates of gold, which in great plenty hung on the walls of the houses.

About that time *Pedrarias Davila*, a knight, accompanied by his wife, *Elizabeth Boadilla*, sailed from Spain to New Andalusia. He had fifteen ships and fifteen hundred men under his command. He first landed at River *Daria*, or Darien, where he built three forts to secure the passage to the Pacific. He was cheerfully received by Nuñez. Not being satisfied with the place called *Maria Antigua*, the town built by the Spaniards in a deep valley, too hot and unhealthy, he sent several expeditions to survey the neighbouring countries. Amongst others, *Gaspar Morales* was sent to explore the Pacific Coasts; it was he, who found such a treasure in pearls that *Pope Leo X.* gave forty-four thousand ducats to a Venetian merchant for one of them. *Gonzalez Badajoz*, also went to the Pacific later on, and explored the coasts for a distance of about 180 miles. Soon after, he was joined by Commander *Luis Mercado*. At first they were very successful, and raised a large quantity of gold from the different Kings and *Cazics* or Governors of the countries where they passed; but the end of their expedition was disastrous. Excepting a few of them, amongst whom was one named *Francisco de la Puente*, who escaped and returned to Darian, the others were killed by King Panza, who, with his troops surrounded and massacred them. This disaster was partly due to their avarice, each soldier at the time, carrying a full load of gold, which prevented them defending themselves as they could have done, had they not been so burdened with treasure.

About the same time there was a clash between Nuñez and *Pedrarias*, who had the former imprisoned and beheaded. Not long after, Lobo Sosa, Governor of the Canary Islands, was sent as Governor of New Andalusia, to replace *Pedrarias*

Davila. But it is time to come back to Gonzalez de Avila, who is supposed to be the discoverer of Nicaragua.

Gonzalez de Avila is supposed to have sailed from Panama in the year 1522. He embarked in that port with one hundred men and four horses in several small schooners, and went north. The first place where he is supposed to have landed is at *Nicoya*, governed by a Cacic of that name, who received him with the greatest regard, and offered him a quantity of gold and gold idols in exchange for trifles. This Cacic and some of his followers were baptised.

From there, he penetrated into the territories governed by a powerful Cacic, named *Nicaragua*. The Capital of the Cacic, was situated where now stands *Rivas*.

Nicaragua received Gonzalez and his followers well, and exchanges were soon made with the natives, who gave them a large quantity of gold for trifles. In the relations of the first historians on the conquests of the Spaniards in America, it is mentioned that this Cacic was a man of great intelligence and that Gonzalez was very much puzzled to give satisfactory replies to his questions. It is more by fear of the devil, than otherwise, that he obtained the conversion of Nicaragua and nine thousand of his subjects. Gonzalez passed through six large Indian towns, each containing about two thousand well-built houses. Crowds of people came to see them and were never tired of looking at their beards, clothes, and horses, all of which were novelties to these natives.

In the middle of his excursion, *Cacic Diriangan* presented himself before Gonzalez. He was accompanied by five hundred men and several young women; each of the men carrying a couple of turkeys, and the women gold, all of which was duly offered to Gonzalez.

Gonzalez did all what he could to convert Cacic *Diriangan* to Catholicism, but did not succeed. *Diriangan* replied that it was imperative that he should consult his priests and women before.

Some days after, he returned, not to be converted, but with a troop, several thousand strong, armed with wooden swords, arrows, and other primitive weapons and covered with cotton cuirasses and strange helmets.

The Spaniards defeated them easily; but Gonzalez, fearing that he could not resist successfully many more such attacks with such a small troop as he had, resolved to return to Panama. During his retreat he met his old friend, *Nicaragua*, but this last had become hostile to Gonzalez, who

had to fight in order to effect his passage through that territory.

In Panama, he related to the Governor all that he had seen and done, and spoke highly of the country which he had visited. But *Pedrarias*, who was a jealous man, and who had shortly before passed sentence of death against Nuñez, took umbrage at Gonzalez, and sent a new expedition to Nicaragua, headed by *Hernandez de Cordoba*, who was successful, and founded the towns of Granada and Leon without much opposition from the Indians.

Gonzalez returned to Spain, called some followers and came back, on his own account, to Nicaragua, via Honduras. A civil war began between Gonzalez and Cordoba for the possession of that country, and continued for a long time.

Several years after, *Hernandez de Contreras*, who lived in Nicaragua, for some reason or other, revolted against Spain. At the head of many Spaniards, who agreed with his ideas, he took possession of Nicaragua and Panama; and it was said that he had the intention to conquer Peru also, and to make an independent kingdom of the whole; but it came to naught in consequence of his death, which took place soon after an attack made by him on *Nombre de Dios*, or Chagres.

According to the celebrated historian and Bishop, *Bartolomé de las Casas*, 60,000 Indians perished during the first year of the wars fought against them by Gonzalez, Hernandez de Cordoba and others. Here is what he says:—

“The Indians of Nicaragua were very sociable, gentle and peaceable. Nevertheless the Governor, or better say the tyrant, and the ministers of his cruelty, treated them as badly as in the other kingdoms. They murdered and robbed them wholesale. Under the least pretext, they killed the inhabitants without regard of sex or condition. They exacted from them tribute of all sorts, and death was the penalty for those who did not comply at once. Nobles, women and children were obliged to work day and night. These poor people were obliged to carry on their shoulders, at long distances, trunks of trees or boards for the construction of ships. Thousands of them were sent to Panama and in Peru to be sold there as *slaves*. Over 500,000 of them were disposed of in that manner, and banished from their country.”

Another ocular witness, *Oviedo*, in his History of America also said that the treatment of the Indians was so barbarous, that in 1528, when the treasurer, *Alonso de Peralta*, another nobleman called *Zurita*, and the brothers

Ballas, started from Leon to visit the villages, and the Indians belonging to them, but they never came back.

Pedrarias sent a small troop to arrest the supposed murderers. Seventeen or eighteen were arrested and strangled by dogs.

The execution took place on the public square of Leon on the 16th of June, 1528, in the following manner:— A stick was given to each, and was told to defend himself against the dogs. Five or six young dogs, which their masters wanted to train, to Indian hunting, were set loose against each Indian. These young, inexperienced animals, barking all the time, ran round the Indian, who easily kept them at bay; but when believing to be victorious, two of the old trained dogs were loosened, and in an instant threw the Indian down, the other dogs flew at him, strangled and devoured his bowels. It was a most cruel and disgusting scene. The seventeen prisoners, which were from the valley of *Olocaton*, were killed in the same manner, the bodies remaining there, by order of the authority, threatening that the same should be done to those who tried to take them away; but on the second day the smell of these corpses was so intolerable that the Governor gave orders to carry them away.

Oviedo adds that as soon as the order was given, some Indians came, cut the bodies to pieces, carried them into their houses and feasted upon them; but I doubt the veracity of this author very much, and I think that he spoke of things which he did not see.

From that time up to 1821, Spain retained possession of Nicaragua, but never conquered completely the mountainous Indians of *Chontales*, nor the Mosquito Indians. They built several towns; one of the principal is Realejo, close to the Pacific, where the Kings of Spain had many of their ships built. In that time, it was a port of great importance. In 1524, *Pedro de Alvarado*, instructed by Cortez, took possession of Guatemala, and received from the Emperor, Charles-Quint, the title of Captain-General of Guatemala, which he kept up to the time of his death, which took place in 1545.

At that time, Guatemala was the Capital of that Captaincy. It included what we know now-a-days as the five central American Republics of *Guatemala*, *Honduras*, *Salvador*, *Nicaragua* and *Costa Rica*. It remained so during three centuries until the 15th of September, 1821, when the provinces of Central

America separated themselves from Spain, and declared their Independence. Some of the royalists seeing that resistance was impossible left the country, others adhered to the party of Independence, with the hope of establishing a Central American Kingdom. After the separation with Spain, two parties were formed, the Republican, under the name of Liberals, the other formed by the Royalists and called by the Liberals, *Serviles*. From that time to now, desperate contests under various names have taken place and are not yet quite concluded ; but the Liberals seem to have the upper hand.

The Liberals decided in favour of a Federative Republic, taking as a model that of the United States, and established under the name of the Central American Republic, a Federation comprising the five provinces of *Guatemala*, *Honduras*, *San Salvador*, *Nicaragua* and *Costa Rica*, the same which formed the Captaincy of Pedro de Alvarado. They made a Constitution, were among the first, who abolished slavery, introduced a system of universal religious tolerance, built new schools, ameliorated the old ones, and did all they could to attract foreign colonists, and aid to their establishment in their country.

When the *Royalists* saw that a Central American Kingdom had no chance of being established, they applied to the Mexican Emperor, Iturbide to annex Guatemala. The Republican Congress replied by decreeing the annexion of Guatemala to the United States.

The short duration of the Empire of Iturbide dispelled the alternative of an adjunction to the Mexican Empire, or to the Union of the United States. Nevertheless, Iturbide sent Mexican troops, commanded by General Filisola, who occupied Guatemala in 1822, but this short domination ended with the fall of Iturbide. General Filisola with his army returned to Mexico, but before going, he convoked a National Assembly, with the idea of establishing the Government of the country.

This assembly met the 24th June, 1823, and on the 1st of July following, they issued a decree, which to this date, is considered as the solemn and fundamental act of the emancipation of Central America. On the 22nd November, 1824, this same assembly proclaimed a federal Constitution establishing the Republic of Central America as a popular and representative government.

On the 29th of April, 1825, General *Manuel José Arce*, was elected President of the Republic of Central America. He was succeeded by General Francisco Morazan, who,

with the exception of a short interval, during which the Republic was administered by Licenciado José del Valle, remained in power until 1839, when the Federation came to an end, and the five States, one by one, separated and resumed their autonomy. Since then, they have kept separate under the names of Republics of *Guatemala, Honduras, Salvador, Nicaragua and Costa Rica.*

When the Royalists saw that they were completely beaten by the Liberals, with the clergy they plotted against the last, but with no other result than the sending in exile of the bishops. They then entered into treaty with England for the sale of their country to that power, but under the energy and perseverance of General Morazan, the Confederation, although wavering, was still keeping a good front to the attacks of the Royalists, when the cholera made a sudden appearance in the country. In some way the Royalists availed themselves of this disastrous event to induce the Indians to a revolt. They put an Indian, the celebrated *Carrera*, at the head of the Indians, and in 1837, he declared war to General Morazan. Beaten several times by Morazan, he was at last victorious, and captured Guatemala, the capital, on the 19th of March, 1840, and proclaimed himself President of the Republic, the 11th of December, 1844.

Several attempts have been made by several Presidents to form again a federation between the five Republics; but nothing has come out of them.

Nicaragua proclaimed its independence on the 30th of April, 1838, and from that time to now, has been directed by various Presidents under the names of Directors of the Government.

Here is the list of all the Directors and Presidents, since 1825, to date. It has been made out by my esteemable friend, Mr. *Désiré Peñor*, Consul of the Republic of Nicaragua, in Paris.

- 1825—1828—*Manuel Antonio de la Cerda.*
- 1826—*Pedro P. Pineda*, Provisional.
- 1826—1827—*Juan Arguello.*
- 1829—1833—*Dionisio Herrera.*
- 1830—*Juan Espinosa*, Provisional.
- 1833—*Benito Morales.*
- 1834—*José Nuñez.*
- 1835—1837—*José Zepeta.*
- 1837—1838—*José Nuñez.*
- 1840—*Tomas Valladares.*

- 1841—*Pablo Buitrago.*
 1843—*Manuel Perez.*
 1844—*Fruto Chamorro.*
 1845—*Sandoval.*
 1847—1849—*José Guerrero.*
 1849—*Teran.*
 1849—*Rosales.*
 1849—1850—*Norberto Ramirez.*
 1850—*Justo Abaunza.*
 1851—*Laureano Pineda.*
 1851—*José del Montenegro.*
 1851—*José Jesus Alfaro.*
 1851—*Fulgencio Vega.*
 1853—*Fruto Chamorro.*
 1854—1855—*Licenciado Franciseo Castellon.*
 1855—*Nazario Escoto.*
 1856—*Patricio Rivas.*
 1856—*José Maria Colzada.*
 1857—*General Martinez.*
 1857—*Agustin Aviles.*
 1859—1867—*General Martinez.*
 1867—1871—*General Fernando Guzman.*
 1871—1875—*Quadra.*
 1875—1878—*Joaquin Chamorro.*
 1878—1883—*General Zavala*
 1883—1887—*Doctor Adam Cardenas*
 1887—1891—*Evaristo Carazo.*
 1891—*General Ignacio Chavez, Provisional.*
 1891—1893—*Doctor Roberto Sacasa.*
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Many have been the civil wars from which this Republic has suffered from time to time. In 1849 *Samoza*, a chief of robbers, tried to do with the Republic of Nicaragua what *Carrera* did with Guatemala, but he was defeated by General Muñoz, who made him prisoner and sentenced him to be shot. In 1851, *Mr. Pineda*, a modest but meritorious man, was elected Director of the Government. But soon after war was resumed between the different parties, fomented by the English, who wanted to take possession of San Juan del Norte. Muñoz at that time, who was hostile to the English, was considered by them as their principal antagonist, and they did all they could to put him out of the way. The result of all this was that Muñoz resigned his command.

Pineda and his Ministers who wanted to arrest him were apprehended themselves, and conducted to the frontier. Muñoz resumed the command of the troops and *Mr. Justo Abaunza* was elected Provisional Director of the Government. When the Parliament heard the news, they also elected a Provisional Director, *Mr. José del Montenegro*, and transferred the seat of the Government to *Granada*. Each of the Provisional Directors composed a Ministry. So it came to pass that Nicaragua had at the same time two Governments, one in Leon, the other in *Granada*.

On the 20th August, 1851, *Montenegro* died. *Granada* fearing to be attacked by Muñoz sent 200 men to occupy *Managua*, and barricaded streets, waiting future events.

Meanwhile a project of a federal Constitution, prepared by the plenipotentiaries of the three States, *Honduras*, *Nicaragua*, and *Salvador*, was concluded and signed on the 8th of November, 1849, and communicated to the States which they represented for its ratification. It was accepted by *Honduras*, *Nicaragua*, and *Salvador*, and the adherence of Costa Rica and Guatemala to it was solicited.

The federal Government having for first president *Mr. José Barrundia*, was installed on the 9th of January, 1851, and notification of it was sent to all the diplomatical agents. The Government of Nicaragua was the first who notified the fact to all the governments with which they had diplomatic relations, and appointed *Mr. Marcoleta* as the representative of the Confederation at Washington. From 1851 to 1854, a sort of peace reigned in the country, and during that time *Mr. Fruto Chamorro*, was appointed Director of the Confederation, and Muñoz, who had been exiled, was recalled and appointed Commander in Chief of the troops; but in the beginning of 1854, when the inhabitants of Leon rose in insurrection in favour of *Castellon*, who was elected Director of the Provisional Government, Muñoz answered to the call of the celebrated *Walker*, and when the last, on his first attack on Rivas, was abandoned by the native troops commanded by Muñoz, this General was charged with treachery towards the North Americans.

At the same time the Government of Leon was attacked by troops from Honduras, commanded by General Guardiola. Muñoz marched upon the enemy and routed them completely, but this was done at the cost of his life.

In 1855, Walker disembarked for the second time at *San Juan del Sur*, and gained several victories over the troops of

the Government at *la Virgen*, and about the month of October of that year, he captured the city of *Granada*, and established a Government in that town. Successively he conquered all Nicaragua, and was appointed Director of the Government. He retained office for some time; but at last was obliged to leave the country with the remainder of his followers.

This is the same Colonel Walker which I have mentioned in my narrative of Count Raousset Boulbon's Expeditions to Sonora. He was the model type of the true free-booter.

If he had been successful, it is probable that Nicaragua and the other Central American Republics, would have been the centre of a large American and European emigration, and the future of that country quite changed; but it is impossible to say if for better or worse, but certainly the change would have been considerable. Walker made a third attempt to reconquer Nicaragua, which he considered as his personal property. Although thrown down from the Presidential chair by a revolution, he never renounced his determination of reconquering it. There was a party in Nicaragua which was in his favour, and if his first intentions were to conquer that country for the United States, he soon changed his mind. What he wanted was to conquer it for himself by all means. From Protestant he turned to Catholic, this being imperative if he wanted to make himself popular with the Nicaraguans.

Walker was very popular in the United States, principally in the South, having resided a long time in New Orleans. In matters of discipline he was inflexible, and for that reason, liked and respected by his officers and soldiers.

In 1860, when he prepared his last expedition, recruiting followers, so many offered to accompany him that he had only to choose amongst them.

This was done with much secrecy, Leagued with an ex-President of Honduras, *General Cabanas*, they resolved to put down President *Guardiola*, and replace him with *Cabanas*.

The occupation of *Truxillo*, a small town situated on the coast of Honduras, opposite Ruatan Island, was his first exploit.

Walker presented himself before the town, at four in the morning, with one hundred and ten men, well armed with Minié rifles. He divided them in two columns. In the fort, there were about one hundred soldiers and three hundred volunteers. The two columns of Walker advanced, one by

land, the other in boats. At about half a mile from the fort, those on land fell into an ambushade, but they defended themselves so well that the enemy took to flight, and the Americans captured the fort easily.

In it, they found a large store of provisions and arms, among which sixteen cannons. The population seemed to accept the accomplished fact.

The project of Walker was to reinstate Cabanas as President of Honduras, and with his help, to re-enter Nicaragua, and to form a new federation between the five Republics of Central America, but his first success came quickly to an end.

On the 20th of August, 1860, the English steamer, *Icarus*, appeared before *Truxillo*, and its commandant summoned Walker to evacuate the town. This evacuation took place the next day. His army was reduced to eighty men well equipped.

After leaving *Truxillo*, Walker and his men advanced in the direction of Cape *Gratias*, where they were attacked by Honduras troops, which obliged them to retreat. They camped on the margins of *Rio Negro*. Some English boats landed at that place some troops commanded by Alvarez, who captured Walker and some of his men. They were taken back to *Truxillo* and delivered to the authorities, *to be treated as the circumstances required*. It was immediately decided to put him on his trial and he was sentenced to be shot.

His faithful companion, Colonel Ruddler, was sentenced to four years' confinement, and the men to be sent back to the United States, at the expense of the American Government.

Before being delivered into the hands of the Hondurian authorities by Captain Shannon, Commandant of the *Icarus*, Walker signed a protestation as under:—

PROTESTATION OF GENERAL WALKER.

“By the present, I protest, before the civilized world, that when I surrendered to the Captain of the steamer *Icarus*, this officer has declared to receive my sword and pistols, as also those of Colonel Ruddler, and that my surrender has been made expressly to him as a representative of her Majesty.

WILLIAM WALKER.”

“On board the steamer *Icarus*, this 5th of September, 1860.”

Immediately after the sentence Walker was put in prison, and when asked if he wanted anything he replied that he

wished to see a priest protesting of his faith in the precepts of the Catholic religion. He said to his guardian :—

I am resigned to death, my political career is ended.

On the 12th, he was taken out of the prison and conducted to the place of execution, assisted by a priest. When in the square of the troops, he made the following discourse :—

I am a Roman Catholic. The war that I have made upon Honduras, at the instigation of another, was unjust, my followers are not to blame. I ask pardon of the people, and I hope that my death will benefit society.

After this, he was shot, and so ended the career of this extraordinary man. His body was buried by direction of two American citizens inhabiting Truxillo. Little was said of him after his death, and some papers hinted that the American Government was glad to be rid of him.

His body was claimed by two of his faithful officers and taken back to his native country (Tennessee), where he was buried in a family vault. Several friends accompanied his remains with the honours due to his rank as General and ex-President of Nicaragua.

The same may be said of Walker as of Raousset Boulbon, that very little prevented him from being a hero ; but he was more fortunate than Raousset, having enjoyed for a time all the glory and honours attached to power.

It is time now to say a few words about the English doings in that part of the world.

Shortly after the conquest of *Jamaica* by the expedition sent by Cromwell in 1656, the King of Mosquito asked for the protectorate of Charles II., King of England. The Governor of Jamaica, acting for his Sovereign, accepted, promising the Royal protection. The Mosquitos kept faithful to this agreement, and each time that England was at war with Spain, they acted as allies, and fought with valour and success against the common enemy.

But this nation, if it can be called by that name, was only composed of a few tribes of Caribs, mixed with whites and blacks.

These tribes occupied the lagoons of *Blue-fields*, nothing more, and it was only an act of justice when the English gave back that territory to the Republic of Nicaragua ; but up to that time they were in possession of Blue-fields and all the adjoining territories, and in 1780, the celebrated *Nelson* was sent to Nicaragua to take possession of San Juan del Norte, but nothing came of it.

Soon after the conquest of California by the North Americans in 1848, Lord Palmerston made another attempt on that country, and succeeded. *San Juan del Norte* and part of the river San Juan were taken possession of, by the English, who changed the name of San Juan del Norte into that of *Greytown*.

In the name of the King of Mosquito, they administered it for several years; but ultimately, in 1850 and 1854, it was occupied for a while by the North Americans, and lastly returned to Nicaragua.

In 1851, an Englishman called Samuel Shepherd was still living in Greytown. He was one of the two brothers with whom Robert Charles Frederick, the third Mosquito King, had exchanged a considerable extent of land for brandy. But part of that land belonging to Nicaragua, this Republic protested.

The real or imaginary acquisition of title deeds confirming that purchase was the base of the speculations of Colonel Kinley, who wished to annex the Kingdom of Mosquito to the United States. Several members of that Republic were at first in favour of the scheme, but they changed their mind soon afterwards. Colonel Kinley took part in the successive events of Nicaragua as the rival of Walker, but his attempt failed.

In 1851 Samuel Shepherd was about 80 years old, a fine robust and active man yet, he had lived on the Mosquito Coasts since his youth, and considered that country as one of the finest and healthiest of all America. When speaking of Mosquito, he used to say, *That country is all mine*. He was certainly a man of character.

But the fact remains that the Mosquito Kingdom has always been a very poor one, scarcely inhabited, and far from being healthy. Its capital, Blue-fields, consists of miserable huts, inhabited by several hundreds of Indians. The best of it consists in its central position with the river Escondido and its tributaries, partly navigable, and giving access to the rich provinces of *Matagalpa* and *Chontales*.

CHAPTER XII.

Projects for opening Interoceanic Canals by Nicaragua, Panama, Darien and Tehuantepec—Manuel Alfonso de la Cerda—John Bailly—Pierre Rouhaud—Napoleon Garella—Napoleon Bonaparte—Vanderbilt Company—What the South American Republics ought to do—Felix Belly—The Maritime Canal Company of Nicaragua—My Opinion about the Cost of Opening a Canal—Certainty of the Opening of the Panama and Nicaragua Canals in the Future.

THE idea of an Interoceanic Canal in the Isthmus of Nicaragua is not a new one. We may say that since the discovery of America by *Christopher Columbus*, the Emperor, *Charles Quint*, recommended to Cortez not to lose sight of *el secreto del estrecho* (the secret of the Straits), and the discovery of the Straits of Magellan in 1519, was hailed with much satisfaction, and contributed to the belief that another strait, somewhere in the Isthmus of Panama and Nicaragua could exist. Many were the expeditions sent into these countries with this object; but an exact knowledge of the Continent shewed that no such thing existed.

From that moment arose the idea of establishing a communication between the two Oceans by a canal.

Gomara, in his history of the Indies says:—"The voyage between Spain and the Philippines, by the Straits of Magellan, is so long and dangerous, that, having spoken many times with illustrious travellers, historians, and navigators, I heard from them about the possibility of opening other passages much shorter, and very profitable to the trade and to enterprisers.

The first could avail itself of the Lagartos River, which source is about sixteen miles from *Panama*, and would terminate at *Nombre de Dios* (Chagres). The second could make use of the river San Juan, which joins the Nicaragua Lake with the Atlantic Ocean. By both these rivers the passage is already half done. The third would be from the river Vera Cruz (*he meant the river Goatzacualco*) to *Tecoantepec* (Tehuantepec), where the inhabitants of New Spain carried boats from one sea to the other. *It is a fact that*

some cannon made in the Philippines were carried by this route to the fortress of Uloa, near Vera Cruz. The fourth is that of Uraba to the Gulf of San Miguel.

The distance between Nombre de Dios and Panama is sixty-eight miles, that of Uraba and San Miguel seventy-five miles; these two are the most difficult, but handicraft is plentiful. If it is decided to make the passage, it will be done. Means are not wanted. The Indies, which will benefit by this work, will supply them. For the King of Spain, who disposes of the Indies' wealth, it is possible and easy, so much the more so, that the object is the trade of spices.

If the passage of which I speak is made, the navigation to Moluccas will be shortened one third, and the ships would sail constantly in warm latitudes without leaving the domains of the Spanish Monarchy, and without fear of meeting enemies. Our goods would be sent to Peru and other provinces on the same ships freighted in Spain. Much expense and trouble would be avoided :—

Herrera mentions also the same lines quoted by Gomara, and he adds that the project of a Canal was proposed to *Charles Quint*, and that it was always a subject agreeable to speak upon, with the Emperor.

Nevertheless, neither the Emperor nor his successors ever decided upon the digging of the Canal.

This was attributed to their firm resolution to keep the traffic between America and the Moluccas entirely to themselves. Everyone knows that for more than two centuries this traffic enriched, and gave a great importance to Spain. What Spain never did, it is probable that the Scotch Company would have tried to do, if they had had time. The founder, Mr. Paterson, a very bold man, had projected to take possession of the Isthmus. To that effect, he established a Colony of merchants and soldiers in the Isthmus. In his manifesto he said that those who would be in possession of the Isthmus would be masters of the universal trade. In reply to this manifesto, Scotland contributed to equip a first expedition of twelve hundred men, who landed in the Gulf of Darien, and founded several localities, which they named *New Caledonia* and *St. Andrew*, but the Spaniards soon obliged them to abandon the country.

In 1804, when the celebrated *Baron de Humboldt* returned from his long voyage in Mexico and South America, in his *Political Essay of New Spain* and in his *Historical Relation of the Voyage to Equinoctial Regions*, he called the attention

of all the World to the possibilities of digging an Interoceanic Canal between the two Oceans. The project which he thought best was that of the Isthmus of *Cupica*, but he was not opposed to those of Panama and Nicaragua.

In 1842, he wrote to Mr. Salomon: "Twenty-five years ago I sent you the description of a project of communication between the two Oceans, either by the Isthmus of Panama, the lake of Nicaragua, or the Isthmus of Cupica. It has been discussed topographically, but nothing has been done yet."

This citation shows that these three projects were those which he considered to be the best, leaving out entirely the two others of *Tehuantepec* and that of *Darien to Raspadura*.

In 1827, the celebrated *General Bolivar*, the father of South American Independence, who spoke with Humboldt and was very interested in the question of the Canal, instructed the English engineer, Mr. Lloyd, to survey the Isthmus of Panama; and it is probable that if the English capitalists had been disposed to undertake the opening of a Canal at that time, they would have been certain to obtain the most complete co-operation from Bolivar and his successors.

Immediately after the constitution of the Central American Confederation, the Hon. Deputy for Nicaragua, *Mr. Manuel Antonio de la Cerda*, proposed to Congress to discuss the question of the Canal, which was forthwith done and approved. But the Guatemalan Archives relating to Nicaragua having been destroyed, when the Mexicans entered and occupied the capital, it was resolved to make a new survey.

This survey was made during the years 1823-1825, and on the 12th of July, 1825, the President of the Republic, Don *Manuel José Arce*, deputed the authorisation to a private Company for the opening of a Canal through the Isthmus of Nicaragua. Among many propositions offered by various Companies, two were the principals, one presented by the engineer, Mr. John Bailly, in the name of Messrs. Barclay, Herring, Richardson & Co., of London, the other by Mr. Carlos Beneski in the name of Aron Palmer, of New York. The proposition of Mr. Beneski was accepted, but it came to nought.

In 1828, *Guillaume I.*, King of Holland, the richest Sovereign of Europe, and a very enterprising man, sent General Verveer to the grand Assembly convoked in Panama in 1825. The Central American Confederation was represented in that general Assembly by M. M. Lorrabal and Molina. General Verveer was so impressed with the communications made by M. M. Larrazahal and Molina to him,

that he decided to return to Holland, and advised the King to send a Minister to Guatemala with the special mission to promote the undertaking of the Canal. This Minister was General Verveer himself, who arrived in Guatemala in March, 1829, well decided to do all what he could for the success of this gigantic work.

But it happened that a revolution had taken place during his absence, and *General Morazan*, had just been elected to power, and was very busy in establishing his government. A long time passed without anything being done, and it was only on the 21st of October, 1830, that the Federal Congress sanctioned the contract passed between General Verveer and Guatemala.

When Central America thought that a new era of greatness was going to begin for their country, the French and Belgian Revolutions took place, and in consequence everything was stopped, and, after the loss of a great deal of time, resulted in the abandonment of the undertaking.

In 1837, General Morazan thinking that it would be very difficult to induce foreign capitalists to undertake the opening of the Canal, decided to have it done by the country itself. With that purpose, he instructed M. M. John Bailly and José Bâtres to make a survey of the country. The survey lasted about six years, during which a revolution overthrew *Morazan* in favour of *Carrera*, and after all, the survey made by M. M. Bailly and Bâtres resulted only in an interesting publication published in 1843, in which the outline surveyed is fully shown by them, that of the River San Juan del Norte, the lake of Nicaragua and San Juan del Sur, by the river Lajas.

After the fall of Morazan, the Confederation was dissolved. The State of Nicaragua proclaimed its independence in 1838. Now the matter of the Canal rested entirely with it. Mr. Pierre Rouhaud, my friend of Granada, was authorized to go to France and see if he could find capitalists willing to undertake the opening of the Canal, but he did not succeed. Several years after in 1843, Count Hompesch, who presided over the Belgian Company of *Santo Tomas*, was also asked to take the matter in hand, but he had the same fate as Mr. Rouhaud. In the meanwhile, Mr. Castellon was sent to France to solicit the protectorate of the Government of *Louis Philippe*. Mr. Guizot, who had sent Mr. Napoleon Garella to survey the Panama route did not care for the offer of Mr. Castellon,

who then thought of Prince *Louis Napoléon Bonaparte*, actually imprisoned in the fortress of Ham.

Mr. Castellon found in the Prince, a person well disposed to the scheme. However, he could not get a decisive reply, and returned to Nicaragua without anything more than a treaty signed with a Belgian Company.

In 1846, Prince Louis Napoleon wrote that he was disposed to accept the propositions of Mr. Castellon. In reply to that letter, the Nicaraguan Government, sent the Paris Minister to Ham for the signature of a treaty very favourable to the Prince.

Three months after, he was free, and immediately, a pamphlet entitled *the Canal of Nicaragua or Project of the Junction of the Atlantic and Pacific Oceans*, was printed in London. In that pamphlet he gave a resume of his ideas about the undertaking trusted to his credit and energy. His project was to make use of the river San Juan, the lake of Nicaragua, the lake of Managua and Realejo on the Pacific. It was beforehand called, *Canal Napoleone*, but the French revolution of 1848, which made *Napoleon*, President of the French Republic, in the first place, and afterwards Emperor of France, modified all his ideas about the Canal, and it was again relegated for a time.

In 1849, a contract was signed between Nicaragua and Mr. Brown, the representative of an American Company, but nothing came of it. After Mr. Brown, came the White and Vanderbilt Company, but Nicaragua, before signing the agreement, asked from the American Government to be security for that Company. Mr. Squier, the American Resident Minister in Nicaragua, who had special instructions from his Government to obtain the concession in favour of an American firm, guaranteed the responsibility of the United States. Accordingly, the Vanderbilt contract was signed the 27th of August, and ratified by Congress the 25th of September following. The next day, the Congress ratified also a treaty of confederacy and goodwill with the United States, to the satisfaction of all.

The treaty of the 27th of August was as liberal as the preceding ones. All flags were treated alike.

Nicaragua reserved for itself the lion's share, which probably had a certain influence on the ultimate want of success.

That country had stipulated that £2,000 were to be paid to them after the ratification, £2,000 yearly until the conclusion of the Canal, and one million of shares, when emitted. Besides, twenty per cent. during twenty years on the nett

products, and twenty-five per cent. during the remainder of the concession, which was for eighty-five years. The promises made by that country were to give sixty square miles of land to the Company, with the perspective for the heirs of the shareholders of an indemnity of fifteen per cent. during ten years on the nett products of the Canal, if the cost did not exceed one hundred millions, and during twenty years if that sum had been exceeded, these sums becoming due at the expiration of the concession.

This concession had the same fate as the preceding ones, and was absorbed in the national catastrophe of which Walker was the hero.

Indeed it is extraordinary to see how badly the South American Republics understood their own interests.

Instead of helping the companies which devote their time and capital in favour of their countries, they only think of making a good business of it.

If they chose to follow the example given to them by *Europe* and *North America*, by not reserving the best part for themselves, but by helping the companies, with large subventions, guarantee of interest, large grants of lands, and privileges extending to a very long time, it is probable that one of the Canals would have been opened a long time ago.

Meanwhile they remain so narrow-minded, and see only to their immediate interests, there is little chance for the completion of such gigantic and wonderful works as those of the Interoceanic Canals.

If Europe and North America had acted in like manner, railways and maritime services, and all other great undertakings, would never have been completed, and the wealth of these countries would have remained stationary, as it is the case with the Central and South American Republics.

If these countries really want to attain the importance, for which they are fit, it is indispensable that the men who govern them should change their tactics, should have great minds, be large and generous, and think more of the future, and not so much of the present. They cannot do better than to follow the examples given to them, by the Founders of their Independence, such as *Bolivar*, *Hidalgo*, *Morazan*, and many others.

On the 1st of May, 1858, a treaty was signed between *Mr. Thomas Martinez*, President of the Republic of Nicaragua, *Mr. Juan Rafael Mora*, President of the Republic of Costa Rica, and *Mr. Felix Belly*, Publicist.

This treaty, containing 28 separate clauses, granted the execution and the exploration of a maritime Canal between the two Oceans to Mr. Joseph Belly exclusively.

The principal clauses were, that the length of the concession was for 99 years, that three miles of land on each side of the Canal were granted to the Company, that all the mines found, should be the property of the Company, and explored according to the laws of the country, that the two ports in both Oceans should be free, the Canal opened to all flags, at a minimum rate of passage, which was fixed at 8 shillings per ton and £2 8s. per each person, free passage for ten years for the ships of the Company, no taxes whatever on the properties of the Company for twenty years, etc., etc.

For the two Republics, it was agreed that eight per cent. of the gross receipts should be paid and divided between them, and that the two Republics guaranteed the Company and their agents from all attacks, and would build a first-class light-house on each side of the Canal, etc., etc. Although Mr. Felix Belly, by issuing several interesting publications, and otherwise, did all that he could to obtain the co-operation of French capitalists, he did not succeed, and after several attempts, and surveys, he was obliged to desist in this enterprise in 1861.

In 1867, he published a very interesting book in two volumes entitled, "*A travers l'Amérique centrale, Le Nicaragua et le Canal Interocéanique*, in which he explains all the difficulties and chicanery from which he had to suffer at the time.

After Mr. Belly, several other Companies were formed, but they had the same fate.

Now we come to the last, known as *The Maritime Canal Company of Nicaragua*, incorporated by an Act of the Senate and House of Representatives of the United States of America, in Congress assembled; Approved February 20th, 1889.

The Committee of Direction was composed in 1889 of:

Hiram Hitchcock, President.

Chas. P. Daly, Vice-President.

Frederick Billings, Chairman Executive Committee.

Thos. B. Atkins, Secretary and Treasurer.

A. G. Menocal, Engineer.

Mr. Ford, Engineer, was the special Delegate of the Company at the Paris International Exhibition of 1889.

Everyone will remember the interesting model of the Canal exhibited in the Nicaragua Pavilion, under the special

care of Mr. Ford, who was always willing to give all necessary information to the public. Here is a copy of the prospectus issued and distributed to the visitors at the Paris International Exhibition.

THE NICARAGUA CANAL.

"This Maritime Canal, for the largest ships, is being constructed through the territory of the Republic of Nicaragua. In part it borders upon the Republic of Costa Rica. It traverses the lowest depression of land in the Cordillera, between the Arctic Ocean and Cape Horn. This depression is occupied by a large inland sea of fresh water, called Lake Nicaragua, and by its outlet the San Juan River. The western border of the lake is within twelve miles of the Pacific Coast, from which it is separated by a low divide of forty-two feet. The surface of the Lake is one hundred and ten feet above the level of the sea. The lake drains towards the Atlantic into the Carribean Sea, through the San Juan River. This great natural feature is to be utilized in the proposed Canal. The lake is one hundred miles long, has an average width of forty-five miles, and a variable depth, reaching in some places one hundred and fifty feet. The San Juan River is already navigable for river and lake craft throughout most of its length.

The details of work to be done are, roughly, a breakwater at Greytown, on the Carribean Sea, dredging thence to the westward ten miles through alluvial ground, then a lock of thirty-one feet lift. At two miles beyond, there will be a second lock, or double lock of the combined lift of seventy-five feet, and a dam across the small stream *Deseado*, above which will be a basin affording four-and-a-half miles of free navigation in the valleys of two small rivers, the *San Francisco* and the *Machado*. Here the water will be raised by dams and embankments, and the basins will connect directly with the San Juan River, above a large dam across that river, which will raise the surface level in the river and lake and secure additional free navigation of sixty-four-and-a-half miles in the river, and fifty-six-and-a-half miles across the lake. On the western side of the lake the Canal enters a cut of slight depth in the earth and rock, nine miles long, issuing thence into the Tola basin, with five-and-a-half miles of free navigation, obtained by damming the small stream, the *Río Grande*. At this dam a series of locks lowers the level eighty-five feet, and the Canal proceeds in excavation down

the valley of the Rio Grande, a distance of two miles, to the last lock, a tidal lock of twenty to thirty feet lift, below which the Canal enters the upper portion of the harbour of *Brito*, one-and-a-half miles from the Pacific Ocean.

The location of the Canal is the result of thorough and minute examination of the region which it traverses, and of due consideration of recent surveys.

The total length of the route from Ocean to Ocean is one hundred and seventy miles, divided as follows:—

Canal in excavation, east side	...	16	miles
Canal in excavation, west side	...	11½	miles
Six Locks	½	mile
		<hr/>	
Total	28	miles
Basin of Deseado	4½	miles
Basin of San Francisco	11¼	miles
Basin of Tola	5½	miles
		<hr/>	
Total navigation in basin		21	miles
Free navigation in River San Juan		64½	miles
Free navigation in Lake Nicaragua		56½	miles
		<hr/>	
Total free navigation	...	121	miles
		<hr/>	
Total from Atlantic to Pacific		170	miles

With the exception of the rock cuts in the eastern and western divides, the Canal in excavation will be at all points wide enough for two ships to travel in opposite directions. Through the basins and in the lake and River San Juan vessels can pass each other and navigate with entire freedom.

The traffic of the Canal will be limited only by the time required to pass a lock. On the basis of 45 minutes as the time consumed in the operation, and that but one vessel will pass in each lockage, the number of vessels which may pass through the Canal in one day is calculated at 32 or in one year, 11,680, which based on the average tonnage of vessels going through the Suez Canal, will give an annual capacity for traffic of over 20,000,000 tons. The locks, however, are 650 feet long and 70 feet wide in the chamber, and two vessels, each of 2,000 tons displacement can be passed in one lockage, thus materially increasing the estimated capacity. The minimum depth of water throughout the Canal will be 30 feet.

The lowest flow of the lake in the dry season is 11,390 cubic feet per second. Its average discharge is 14,724 cubic feet per second, or in one day 1,272,530,600 cubic feet. The water required for 32 lockages in one day is 127,400,000 cubic feet: consequently the lake supply alone is ten times the maximum wanted for the operations of the Canal.

The time consumed in passing from Ocean to Ocean by steamers, is estimated at 28 hours, which includes one hour and twenty minutes for possible detentions in narrow cuts."

To this day, the Maritime Canal Company of Nicaragua, has made many surveys, and I think that excavations have been commenced at several places, but the result has been of little importance.

On the 21st of February, 1891, there was a debate in the Senate at Washington on the Nicaragua Canal Bill. Some Senators spoke in favour, others against, and the Senate ultimately adjourned without having come to any decision regarding the Bill.

It was estimated that the Canal could be made at a cost of 100,000,000 dollars, or £25,000,000; but in my Journal the *Humming Bird*, Vol. 1, page 30, I say that I am not of that opinion, and that the opening of the Nicaragua Canal will cost just as much as that of the Panama Canal and probably more.

I am still of the same opinion.

In 1892, there was another debate in the Senate at Washington about the Nicaragua Canal Bill. The promoters asked from the Government of the United States to guarantee a minimum interest of three per cent, I believe, on all the capital subscribed, during the completion of the work, but again the Senate adjourned without having come to any decision.

I do not know what will be the next move; but I am always of the same opinion as already expressed in the *Humming Bird*, that one day or another, not far distant, not only the *Nicaragua Canal* will be opened; but also the *Panama Canal*. In a very short time the opening of both of them will be an absolute necessity, and both will rank amongst the most magnificent and most remunerative works of the Twentieth Century.

From the beginning, I have been in favour of the Nicaragua Canal, and in the Geographical Congress of Paris, 1878, at which I assisted as a Member of the Congress and as the Delegate of the Republic of Guatemala, I supported

the opening of the Nicaragua Canal, in preference to that of Panama; but it was not so much because I considered the difficulties of the undertaking to be less, but more especially for philanthropic purposes, my belief being that loss of life would be less in Nicaragua than in Panama, in consequence of the better resources of Nicaragua with regard to all the commodities of life.

Having resided in both countries, I was able to form an opinion on the subject, and I regretted very much at the time, that the majority of the Delegates of the International Congress held in Paris in 1879, did not vote for that route. But as I said in the *Humming Bird*, January, 1892, and in other notices which I wrote on the Panama Canal, now that this last one is already half done, it would be better to complete the Panama Canal first, and to begin the Nicaragua Canal soon after the opening of the former, because twenty or thirty years hence, I doubt whether even if the two Canals will be adequate to the traffic of that time.

Furthermore, it is *absolutely necessary* that all nations should leave behind all idea of monopoly on these routes and abandon their keen competition about it. Such enterprises must be quite international, the work of all the nations grouped together hand in hand, and contributing, each one, according to its means, to the realization of this gigantic and admirable work of men, which once opened will be a great factor to the future and greatness of the world at large.

It is also *imperative* that the Republics of *Colombia*, *Nicaragua*, and *Costa Rica*, should renounce entirely to their exigencies. The members of the Governments of these countries must give all facilities and help the Companies in every way. They must think of the great future of their countries, which depend greatly on the success of these grand undertakings.

I conclude with that part of the message of President Harrison about Nicaragua, sent and read in the Congress of the United States on the 6th of December, 1892, and with that of President Cleveland read at the opening of the Session of 1893.

THE NICARAGUA CANAL.

“The President then repeats with great earnestness his recommendation that prompt and adequate support should be given to the American company engaged in constructing the Nicaragua Canal. It is, in his opinion, impossible to

overstate the value of this enterprise from every standpoint, and he hopes that there may be time even in the present Congress to give it an impetus which will ensure the early completion of the work and secure to the United States their proper relations to the enterprise when it is completed."

In the message presented by President Cleveland to Congress on the 4th of December, 1893, there is a passage concerning the Nicaragua Canal, which seems to indicate that the American Government is willing to give a helping hand to the Promoters of the Nicaragua Canal Company. If the measures proposed by President Cleveland pass, there are some probabilities that the completion of the Nicaragua Canal may take place before that of the Panama.

I hope that this news will stimulate somewhat all persons interested in the Panama Canal, and that means will be soon found permitting to continue the works, so as to be able to complete and open the two Canals at the same time, the one being the completion of the other.

CHAPTER XIII.

GRANADA.

Departure from Granada—The Lake—River San Juan—San Juan del Norte—Sailing from San Juan del Norte—At Sea—Arrival in New York—New York in 1853-1854—International Exhibition of New York—Adelina Patti—Natural History of New York—Humming Birds—The English Sparrow—Population—Climate—Industry Commerce.

BEFORE leaving Granada, I may say a few words about its inhabitants. I found them always sociable and sympathetic to strangers. Once admitted in a family, you could depend on a hearty welcome, and soon was considered as one of the family. Distractions being scarce, it was the custom to make frequent visits one to another, principally at night. Chocolate and cigarettes were usually offered to the guests in the course of these visits. It is there that I saw, for the first time, ladies smoking cigarettes. Among the people, who were a mixture of Indians and Negroes, with all their half-breeds, women used to smoke cigars.

One of the most extraordinary objects which attracted my attention during the passage of a religious procession was to see *Jesus Christ* represented black. The majority of the inhabitants being of that colour, hence the probable reason of such a thing.

On the 18th of May, 1853, I embarked in a large boat waiting for me on the lake. Excepting a small covering of palm leaves, erected at the back part of the boat, it was open on all sides. It was crammed with goods, forming an elevated floor. On each side was a large board on which the watermen walked, when pushing the boat with *palancas* (long poles). The boat was manœuvred by ten rowers and one at the helm, all of them black and totally naked.

On that day, they only rowed to some small islands close by, where they usually make their provisions of plantains, which is their principal and sometimes sole food.

The plantations were in the midst of the primeval forests which cover these islands. It was a grand sight, quite

animated by an extraordinary number of birds and mammals—chiefly parrots and monkeys. We saw many howling monkeys, and killed two of them.

But in doing so, I was invaded by thousands of *garapatas*, an insect classified among the *Arachnidae*, or spiders. They were of two sorts, one brownish very large, and another reddish, so minute that it could hardly be seen. I got rid of the large ones easily, but I was not so fortunate with the others, so that with the mosquitoes which were very numerous, I passed one of the most wretched nights possible.

These *garapatas* are flat, and introduce themselves in all parts of your body, incrusting their mandibles in your flesh, and remain there until they are fully grown. Then they leave, but meanwhile they literally devour you, causing all the time an insupportable itching.

I did not get entirely free of them until on board of the steamer on which I embarked for New York.

The men went on land and made themselves happy, drinking spirits.

I did not see them until the next day at twelve, and it was half-past two when we really started on our voyage. For a time we sailed amongst the islands. It was a scene of the most magnificent beauty. Animal life was exuberant. Birds, monkeys, crocodiles, fishes, could be seen in plenty on all sides. Showers were frequent but short. Our men were so lazy, that when unfortunately there was no wind, we scarcely advanced at all. We kept close to the shore, and we stopped every day at breakfast and dinner time. After dinner they remained for hours basking in the sun.

On the fifth day, one of them fell ill, and we were obliged to leave him in a small village. Another, with a bad leg, was also left there. Now the eight remaining, did not want to go on, and refused to move. It was only after having lost one day, and paid them £2 extra, that I induced them to go as far as the *Castillo*, the fort of San Carlos, which commands the entrances of the River San Juan and the Lake. Besides the fort, there were scarcely thirty houses, all of them built on the margin of the lake. It is a very picturesque site. I landed and made a visit to the Commandant of the fort, who was a very nice man. I told him about my men refusing to go forward. He had the kindness to settle that matter, and to supply me with two soldiers. From that moment all went well. We left *San Carlos* at one p.m., the men had scarcely anything to do, the current was strong.

and propelled the boat at an average of three miles per hour.

The margins of the river, for a long while, are charming. It was a repetition of what I saw from *San Juan del Sur* to *la Virgen*, but even more picturesque on account of the river. For miles and miles the river flows on through primeval forests, rich in beauty and ever changing variety. Eye and ear are alike charmed by the luxuriant foliage of the trees, creepers, orchids, and many other parasitical plants.

Numerous animals give much animation to the beautiful scenery, many coloured birds fly about, flocks of parrots scream with all their might, monkeys of several kinds chatter or gambol in the trees, some of them are so fearless, that they stand quite close, looking at you when passing by. I was very much amused with an incident which took place at the time. So many monkeys were standing on the same branch, that when we passed, in the hurry of their flight, the branch broke, and nearly all of them fell in the water, but they easily swam back on land, none the worse for their involuntary bath, except for a piteous appearance.

Crocodiles are quite numerous, swimming lazily in the river, scarcely showing the end of their nose above the water, others basking in the sun on the margins of the river, not deigning to move at our approach. They had the appearance of fallen trunks. I had several shots at them, but without the least effect. They scarcely moved at all. I recommend the River San Juan to industrials in search of crocodile hides. At a very small cost, they could establish nurseries of these animals, and make money. Besides the crocodiles hides, they could also gather large quantities of *Iguanas*, a large species of lizard, over one yard in length from end to end, also much used for industrial purposes. The Iguana is a very peaceful animal, usually seen on the branches of the trees on the banks of rivers. They remain quite still at the same place for hours. They are usually green or brown sprinkled with dark spots. They are quite harmless, and can be easily domesticated. They feed on insects; they are oviparous and lay a large number of soft eggs, which, when boiled, are very good eating. They contain scarcely any albumen. The flesh is also very good to eat, and I made many good meals with them. *Jaguar* and *Puma* (*Felis onca* and *concolor*), *Danta* (*Tapirus dowi*), *Jabali* (*Dicotyles labiatus*), a kind of small wild boar *Venado* (*Cariacus rufinus*), *Cotusa* (*Dasyprocta punctata*),

and a quantity of squirrels (*Sciurus*) inhabit the forests of the River San Juan and were occasionally seen.

The Danta, or Tapir, is one of the most curious animals found in Central and South America. It belongs to the order *Ungulata*, or Hoofed Animals, sub order *Perissodactyla*, closely allied to the Elephant and still more to the Rhinoceros. It is an antideluvial form. The fossil species which have been found in different parts of the world scarcely differ from the living species known. These animals are characterized by having the muzzle prolonged into a small mobile trunk, a very short tail, three pairs of cutting teeth, and one pair of small canines. They have four toes on the anterior and three on the posterior feet. They are swamp-loving animals, excellent swimmers and divers. The species found in Nicaragua, *Tapirus dowi*, dedicated to the well-known Captain Dow, is very closely allied to *Tapirus bairdi*, found in Mexico and in Central America. It is about three-and-a-half feet long. The skin is very thick, and covered with a scanty coat of very short hair. The colour is uniform dark gray. It inhabits the inmost recess of forests. It is a powerful animal, and a good match to the Jaguar. It lives on vegetable matter, fruits, etc. When young it is easily domesticated. The flesh somewhat resembles that of the bull, and the skin can be used for many industrial purposes.

If it were not for the *mosquitoes* and *garapatas*, a trip along the River San Juan could be remembered as one of the most delightful and pleasant excursion in the Tropics. Next to the unpleasantness of these insects, there are the risks to which you are exposed in consequence of the dangerous currents of the river, especially at the rapids, where the river is densely besprinkled with rocks, leaving only a narrow and dangerous passage for boats.

Eight of these rapids have to be passed from *San Carlos* to *San Juan del Norte*. The first, and one of the worst, lies close to another fort, also called *El Castillo*, where a small village has sprung up since the starting of the American Company from New York to San Francisco.

When we arrived at that village, an American steamer was there expecting the passengers from *San Juan del Sur*. In consequence of these rapids the passengers have to be transhipped here to smaller steamers, and are sometimes kept waiting two or three days.

The *Castillo* is on the summit of a pyramidal hill. It was built by the Spaniards soon after the conquest of the

country. In 1747 it was thoroughly repaired. The site is well selected and fully commands the river. It is the celebrated place carried off by NELSON, in 1780, when Commandant of the Hichinbrook. With the troops commanded by Colonel Polson, he attacked the Spaniards, and took possession of the fort. The garrison made a stout and valliant resistance, but were soon compelled to surrender.

NELSON remained there several months, and lost nearly all his men from sickness, and he had himself a very narrow escape. In 1781 the place was evacuated.

The outside of the fort had a good appearance, but nearly all the inside was completely ruined, and was transformed into a small forest, all available spaces being occupied with trees and bushes. However, a small garrison occupied part of it.

We passed successfully all the rapids, and on our way saw many wrecks; among them, one of the American steamers, lost only a few days before. It was one of the two running between El Castillo and San Juan del Norte.

About three miles from the Castillo, we passed the small island Bertola, on which, remains of fortifications could be seen. The fort which existed on this island was the first taken by Nelson in 1780. On this island were buried the English, who died from the results of the war or from sickness. At a short distance from Bertola are the rapids of *Machuca*, one of the most dangerous. It was here that the American steamer was stranded.

The River San Juan, with its shoals of gravel, its rapids, rocks, and its numerous islands, which in many places scarcely leave a passage for boats or vessels, can be considered as very dangerous, and it is always a matter of congratulation when this voyage can be made without accident. At the end of our second day, from San Carlos, we arrived at San Juan del Norte. We had been twelve days on our way from Granada, a voyage usually made in six. So I was glad to see the end of it.

I stopped at an hotel kept by an Italian, at a cost of eight shillings per day, for board and lodging. San Juan del Norte, or Greytown, was at that time the centre of a great activity in consequence of the International transit. From twelve to twenty ships were usually anchored in the bay, which is fine, but very badly protected from the winds. Nevertheless, being at that time the only port on the Atlantic, and its peculiar position as the head of a railway or a canal,

it had a far greater importance than could be attributed to it from what I saw of the town.

Since 1848, it had been occupied by an English agent, acting and governing the country in the name of the King of the Mosquito Indians. Two English warships remained permanently here.

The town consisted of about two hundred houses and huts inhabited by several hundred people of all colours, blacks and mulattoes being the most conspicuous. Several hotels had been recently built and shops opened, all of them kept by foreigners, chiefly English, American, and Italians. The principal governmental appointments were occupied by blacks, or mulattoes from Jamaica.

Duties are paid on all goods landed here. When I arrived, the steamer for New York had just gone, so I was obliged to remain two weeks in San Juan.

During that time, I made several excursions in the neighbourhood; but I collected very little, because the country is flat, damp, and devoid of trees. The best species of birds which I secured was a beautiful crimson and dark red tanager, *Ramphocaelus dimidiatus*, which was plentiful.

At night, the moisture was so great, that in the morning the soil was soaked as if it had rained hard, and it was dangerous to start for hunting excursions before nine a.m. Showers were frequent, and in the intervals it was very hot. When fine, a sort of northern breeze began to blow about 4 p.m., and lasted part of the night. It was rather enjoyable.

The connection of the Lake of Nicaragua, with the Atlantic by the River San Juan, was discovered in 1529, and during the last quarter of the Sixteenth Century a considerable commerce was carried on, by this route between *Granada* and the *Lake Nicaragua*, and the cities of *Nombre de Dios*, *Carthagena*, *Havana*, and *Cadiz*. It is probable that the establishment of that port, and the construction of the forts along the River San Juan were made at that time. In 1665, after an invasion of that country by the English, the port of San Juan was fortified.

At the end of May, the passengers from San Francisco began to arrive and also those from New York, so that the place was crowded to excess for a day or two, and on the 3rd of June, I embarked on the fine steamer, PROMETHEUS for New York, where I arrived on the 15th of June, after a very fine passage. On board, I met an American whom I had known in San Francisco as a greengrocer. In four years he

had made such a fortune in that trade, that he was able to retire from business altogether with a very respectable income. On our way, we stopped several hours at Habana, but I shall leave the history of that pearl of the Islands, for another occasion, when I visited the town and its neighbourhood.

NEW YORK.

I entered the magnificent port of New York, on the 15th of June, 1853. Entering from the Atlantic Ocean, you cannot be less than struck by the peculiar manner of the formation of the bay. On each side of this admirable bay there is a large and fertile island. *Long Island* on the right, and *Staten Island*, on the left. After having passed the *Narrows*, where the distance between the two is narrow, the coasts widen suddenly, and give access to a large and deep sheet of water, which could contain easily all the vessels of the world. This is the port of New York. This magnificent position has greatly contributed to the rapid growth of the Imperial city.

New York itself is built on the Island of Manhattan, and a portion of the mainland.

I remained in New York from the 15th of June, 1852, to the 12th of July, 1854.

NEW YORK, the chief city of the United States is located at the mouth of the Hudson River in the southern part of the State of New York, and the city occupies the county of the same name. It is bounded on the south by New York Bay, on the west by the Hudson River, on the north by the city of Yonkers, and on the east by the river Broux. Spuyten Duyvil Creek and Harlem River divide the City into two unequal portions, and make the northern boundary of Manhattan Island. The city is 16 miles long, and varies in width from a few hundred yards to $4\frac{1}{2}$ miles on the north part. Its area is about $41\frac{1}{2}$ square miles or 26,500 acres, of which 12,100 are on the mainland. Its location is both beautiful, healthful, and very advantageous to commerce. Its large and commodious bay, the Hudson River, navigable for 150 miles, the neighbouring sea, and the diversified country about it, contribute to its attractiveness, while its varied surface and extensive water front conduce to its general healthfulness. Its position in the centre of the northern part of the coast, makes it a natural entrepôt for the Middle States. The Erie Canal and several lines of railroads place the city within reach of the great West, and on the East, New England joins the city. The State and city of New Jersey fringe the opposite bank of

the Hudson, and along the east, the city of Brooklyn and its neighbouring towns form a continuous city upon the eastern side. A few years ago, was completed the gigantic and wonderful bridge connecting Brooklyn with New York. From the Battery, which formerly was a very fine promenade, the view of the Bay, the Islands, Brooklyn, Staten Island, Jersey City, and the entrance of Hudson River present one of the most animated and beautiful pictures to be found. The upper part of the city lies opposite the Palisades, and is remarkable for its rural and picturesque scenery. The lower part, from the Battery for about three miles north, is rolling and sandy. It then rises slightly and becomes rocky. At Central Park, near the centre of the city now, but outside it in 1853, it rises into broken hills, and northward along the river, the land rises to a height of 238 feet at Washington Heights.

Above the island the land is hilly and rough. The lower part of the city has been much altered by filling and grading, and the original width has been materially increased by filling in the river on both sides. The city is compactly built up to 59th street, at the southern end of Central Park, and on the east of the park, it extends some three-and-a-half miles further to the Harlem River. All the villages on the north and west sides are now included in the city, which is so rapidly spreading up that it promises to be one of the largest and most populous in the world. Indeed, few cities in the world can vie with New York in the beauty and convenience of its site.

The port is defended by the strong fortress of Fort Tompkins on the west, and Fort Hamilton on the east, while old Fort Lafayette stands in the bay a short distance from the shore. At the confluence of the east and Hudson River is Governor's Island, distinguished by the circular fortress on its northern shore. Piers are numerous, the principal being the great pier of Jersey City, where the Cunard line of steamers lands its passengers, the Hoboken pier of the Hamburg and German lines, and the large piers on the Hudson River, where the Inman, White Star, Anchor, National and French lines land their passengers.

To give an idea of the extraordinary development of New York, I subjoin several dates which speak for themselves.

In 1653, the population was	1,120
1753	10,256
1800	60,000
1820	123,000

1840, the population was	312,000
1850 " "	515,000
1860 " "	813,000
1870 " "	942,000
1880 " "	1,200,000
1890 " "	1,500,000

Very likely it will be over 2,000,000 in 1900, and there are no reasons why it should not continue to accrue in the same proportions, during the Twentieth Century. With Brooklyn, Jersey City, and Hoboken, which can be considered as parts of New York, the population exceeds 3,000,000. New York at first spread its streets and avenues in any direction that seemed most convenient, and the result was that the lower and older part of the city is more or less irregular. But when the City began to increase considerably, new streets and avenues were laid at right angles, and improved greatly the appearance of the City. North and South of the Island, there exist twelve fine and long avenues extending its entire length. Many others, although smaller, extend from West to East. Magnificent buildings have been erected along these avenues, and present a very imposing appearance which is not surpassed by the finest Boulevards of the principal Capitals in Europe.

The oldest and the most important one is the well-known *Broadway*, one of the finest thoroughfares in the world. It runs from the Battery to the Eighth Avenue and the 59th Street West. It ends at the Circle and at the Boulevard. Here is one of the entrances to Central Park. For nearly its whole length it is filled up with magnificent buildings and retail or wholesale shops, some of which are splendidly got up, and can compete with those of the Boulevards and Rivoli Street of Paris. In fact, Broadway is the centre of everything, Banks, Theatres, Hotels, Churches, are to be seen all along the route. Omnibuses, tramways, and vehicles of all descriptions are constantly passing by, and the animation which it gives to that fine thoroughfare is equal at least to that of Piccadilly, Strand, Holborn, and City in London; but the aspect of Broadway is infinitely better than that of these London thoroughfares in consequence of its width, which nearly equals that of the Paris Boulevards. The footpaths, which are wide, are crowded with people, day and night. The shops are very fine, the goods well exhibited, and thronged with lookers-on.

Among the many fine buildings fronting Broadway, I shall mention the *Post Office*, a magnificent building, the

largest of the city. It has a frontage of about 260 feet on Broadway; *Trinity Church*, opposite Wall Street. It has a tower 284 feet high, from which visitors can enjoy a very fine view; the *American Banknote Company*, at the corner of Liberty Street; the gigantic and splendid palace of the *Western Union Telegraph Company*, at the corner of Dey Street; *St. Paul's Chapel*, built in 1766; the *City Hall*, facing the south side of *City Hall Park*. It is a fine and imposing building of the Italian style; the beautiful and large marble building of the *New York Life Insurance Company*, one of the most successful institutions of that class in New York; the sumptuous hotels of *San Nicholas* and *Metropolitan*, the first on the east, and the second on the west. Both are first-class hotels, very large and with marble frontages, if my remembrance is correct. I have been staying in both. The price was twenty shillings per day, for a single room and board, but all first class, and with a very good service. Close by, is the *Grand Central Hotel*, and a host of others, just as large and fine, but too numerous to mention here.

Among the commercial houses, I shall mention the *New York Stock Exchange*, in Broad Street, *Kemp's Building*, *American Watch Company Building*, *Lord and Taylor's Store*, *Stewart's Store*, an immense iron building, *Deylin and Company Store*, *Sewing Machine Company*, *Tiffany and Company*, the well-known firm of jewellery and precious stones, *Arnold Constable and Company*, the great dry goods establishment, etc., etc. There are so many more that it is quite impossible to mention them in such a limited work.

The *Evening Post* and the *Staats Zeitung* buildings are also very fine, and the centre of great activity.

At 23rd Street, Broadway crosses Fifth Avenue and skirts one side of *Madison Square*, which is well supplied with trees and lawns, and one of the most attractive and striking features of New York.

From this point, Broadway continues to the Boulevard already mentioned. This Boulevard is a wide avenue continuing west of the city, and over the heights of the Hudson into Westchester County.

Before reaching the Boulevard many fine hotels are met with, the principal of which, is *Steven's Family Hotel*, a very large establishment, more like a palace than anything else. Further on, is the *Fifth Avenue Theatre*, the *Grand Hotel*, the *Wood's Museum*, the *Broadway Tabernacle*, a very

imposing structure, and lastly the *Circle Hotel*, which ends this remarkable thoroughfare.

Next to Broadway, the most important street is Fifth Avenue, extending over four miles in length, and entirely occupied with palatial private residences and hotels, among which are the *Fifth Avenue Hotel*, and the *Albermale Hotel*, frequented by the aristocracy. There are also many fine churches, art galleries, clubs, music halls, etc., etc. The most wealthy families have their costly or palatial residences here. That of Mr. A. Stewart is a large and magnificent marble palace.

Among the other fine monuments scattered everywhere in the city, I shall mention the *Cooper Union*, an Institute founded by the late Mr. Cooper for the advancement of Science and Art; the *German Savings Bank Building*, the *New York College of Physicians and Surgeons*, the *Hippodrome*, the *Grand Central Depot*, the *Columbia College*, the *Bible House*, the *Masonic Temple*, the *Metropolitan Museum of Art* at 128 west, 14th street, founded about 1874, which contains a very fine collection of paintings, drawings, works of art, and ethnological objects. In 1875, the Trustees of the Museum bought the celebrated collection of Antiquities from the Island of Cyprus, known as the *Cernolia Collection*, from its discover, at a cost of \$49,360.72 or £10,000. This interesting and magnificent Collection was in London in 1873-1874. The well-known firm of M. M. Feuardent and Company had it exhibited at that time in their house in Great Russell-street, W.C., where I saw it. Afterwards during a visit that I made in New York in 1876, I had the pleasure to see it again in the Metropolitan Museum, where they made a grand show. My friend, the late Mr. Bland, a celebrated Conchologist, who was for many years Assistant Secretary to the Museum, and who had assisted in the arrangement of the collection took me there, and I spent several agreeable hours in admiring again these beautiful statuettes, heads, vases, etc., quite unique in their way.

If I remember well, the British Museum had the first refusal of this Collection, and I have always wondered why it had not purchased it. Lastly comes the *Menagerie*, and the *Natural History Museum of New York* in Central Park; the great pleasure ground of New York. Lately, great progress have been made in the Menagerie and in the Museum, and both are taking a front rank amongst the Zoological Gardens and Museums of America. Since the

purchase of the well-known collections of bird skins, made by M. M. *Elliot* and *Lawrence*, this department is acquiring a great reputation among Scientists, and no place could be more convenient than its present location in the magnificent grounds of Central Park. The site of this park, which on my first visit to New York, was one of my hunting grounds for collecting Insects, occupies now nearly the centre of the city, so it is easy to have an idea of its extension on that side since 1853.

It is impossible to give a full description of all its beauties; but I remember that in my last visit, in 1877, it was one of my daily excursions, and I passed many agreeable and useful hours in the grounds.

The length of the park is about two-and-a-half miles by half-a-mile width. It contains about 862 acres of lawn, garden, wood drives, footpaths, etc., with a very fine lake and brook. It takes about half-an-hour to row round the lake.

There are carriages running at frequent intervals round the park. It takes about one-hour-and-a-half to make the entire circuit, and it costs one shilling.

There are fifteen miles of carriage roads, eight miles of bridle paths for riders, and over twenty-five miles of walk.

It is extremely picturesque, the engineers having made good use of the rough hills and tangled woodland which originally stood there.

By walking, all the sights are better seen, the bridges, the belvedere, the cave, the springs, the lake, the hills, all are worth seeing. Dairy, Restaurant and Casino have been built inside the park, and are very well patronized, as also the Carousel, where are swings and all sorts of amusements for children.

One of the peculiar features of New York, which attract more especially the attention of the European, are the railways running parallel to the streets. They are in New York what the Metropolitan underground railways are to London, excepting that the latter ones run underground, while those of New York are constructed in the streets at the height of the first floor. They are running frequently and always full, and they must certainly be an annoyance to the dwellers of the houses situated along their route.

I passed two "Fourth of July," the anniversary of the Independence of the United States, in that country.

If not seen, it is impossible to have any idea of the

animation and excitement occasioned among the people by this event. From the end of June to the 4th of July, it can be easily seen that something unusual is going to happen. Numerous sandwich men are seen in the streets with circulars on their backs, informing the public where the best flags and crackers can be bought. The sale of these goods is fabulous during several days. On all sides are seen men and children carrying flags, banners, and crackers. On the 3rd of July begins the decorations of houses. All the flags of the world, but more especially that of the United States, are displayed with such profusion that nothing else can be seen. From one street to another not a single space remains without a flag, banners cross the streets from one side to the other. It is by hundreds of thousands that they are seen, and the houses disappear entirely under this exuberant display of flags of all colours. The next thing is the Torch-Light Procession, which always takes place on the night of the third of July.

All the windows of the houses are crammed with spectators, eager to see the procession, and many are those who cannot secure a place for that purpose.

At about 10 p.m. the procession, composed of many thousands of people, bearing torches, Chinese lanterns of all colour and descriptions, flags, banners, etc., begin their march, of which the itinerary is known by all, beforehand.

The procession usually lasts from twelve to one or two in the morning, and for hours you see them pass by, Societies with their banners and cars, Soldiers, Members of Clubs, Citizens of all descriptions, women, children, masks, fancy dressed people, including even representatives of wild Indians, all of them with their bands of music, follow one another, and all the while Bengal fires are lighted in the corners of the streets, pistol shots are freely fired, rockets and crackers are fired in all directions, without caring where they go, and what mischief they may cause. Add to that the continuous vociferations and hurrahs of the spectators and of the members of the procession, and you will have a feeble idea of what a Torchlight Procession is in the United States. Europeans especially Italian and French cannot have a better idea of what it is than by supposing that they assist at a *Monster Carnival*, with the addition of shots, fuses, and crackers fired at random in all directions. How many hundred weights are fired in the United States during the third and fourth of July every year

would be an interesting problem to solve. Of course many accidents always take place at these times ; but that does not count for anything. The next celebration will be even more animated than the preceding one.

On the 4th, the celebration is more solemn, at least in that part of the town where the official ceremony takes place, and to which assists the President of the Republic, the Senators and deputies, high dignitaries, the Diplomatic body, and a very large number of guests. There is always an address read, a prayer said, a lecture of the Declaration of Independence, poetry recited, speeches made, good music, and everything done according to programme. It is really grand and imposing. Meanwhile the citizens continue their monster processions through the town, shooting, firing their guns and pistols, fuses and crackers, eat, drink, walk, congratulate themselves, and make such an infernal disturbance during the whole day and night, that those who have delicate health must be sure to go away from the city a day or two before, if they wish to escape madness.

The day ends with many private and official fireworks, illuminations, Bengal fires, and the like.

In a certain way this celebration of the day of independence is a very good thing. All men require holidays and changes, and what day could have been better chosen than this, the day which made them *all free*.

During the elections, which take place every four years, and lasts several weeks, processions with all sorts of flags and banners, with their bands of music, decorations of houses, etc., are indulged in as on the fourth of July, with the only difference that sometimes two rival processions meet, and a free fight takes place ; but of late it has seldom come to that.

As soon as the nomination of the President is made, all is quiet again, and everyone returns to his occupation. Although it is expected that all the offices will be given to the supporters of the new President, it is accepted by all as an accomplished fact without mental reservation.

The citizen who was yesterday a President, a Minister, a Postmaster, etc., will return to his ordinary occupation, and will be replaced by the new one.

I only wish that in Europe, in Central and in South America, and in other parts of the world, all those who occupy governmental offices had the same philosophy.

Fires used to be frequent enough during my stay in New York, and have contributed to the formation of several brigades

of Firemen, who are always ready to reply to the call of the fire-bell.

This useful institution consists of Volunteers, who buy, not only their uniforms, but also the fire engines with all their accessories, and keep them in the very best order. Some of their engines are golden outwardly, and shine brightly. There is a keen competition between the several brigades to display the best horses, best engines, best of everything, and this competition is not only seen in these displays, but also in their splendid way of extinguishing fires.

In 1853, there were six distinct companies of firemen, all rivals. As soon as the City Hall bell was heard, it was a positive contest between all the firemen to be the first in bringing their engines to the scene of the fire, and to attack it strenuously, and generally with success.

This rivalry between the firemen in such circumstances is a fact worth imitating in other countries. In 1853 they had no horses, so they had to drag the fire engines on foot.

In the greatest heat of the summer, or in the bitterest cold of the winter, you could see them always running and dragging their machines at a prodigious speed. The only distinction in their costume was a woollen red shirt, and a broad, varnished tin helmet. It was a point of honour between the various Companies to arrive first on the scene of the fire and to extinguish the same before the others arrived.

At night, the sight of the firemen is worth seeing. Each company is preceded by several tall fellows bearing lighted torches. One in the middle has in his hand a large speaking trumpet, with which he continually encourages the men by energetic shouts of "*Go-ahead! Go-ahead!*" which at the same time serves as a warning to the crowd to keep the place clear.

The running of these red costumed men drawing their engines at full speed, the lighted torches, the blowing of the trumpet, and the vociferous cries of *Fire! Fire!* by the crowd who run behind the firemen, the fire itself, the whole thing has an extraordinary aspect well worth seeing.

The crowds as a rule are very well regulated, and, if necessary, help as much as it is in their power to do; and as soon as the conflagration has been put out, many are the hurrahs in favour of those who have distinguished themselves.

If salvage of people has taken place, those who have done these more or less heroic actions are applauded in the most vigorous manner, and in all the morning papers their

praises and names appear in big letters and they are the heroes of the day.

Of course these institutions are supported by many philanthropists, and gifts of all descriptions are occasionally sent to them. They are very useful bodies of men, and it is considered a great honour to belong to one of them.

Of places of amusement, there are about forty between Theatres, Music Halls, Hippodromes and others, the principal being the *Grand Opera House, Fifth Avenue, Lyceum, Metropolitan, Olympia, Niblo's Theatres*, etc. The Niblo's Theatre is attached to the *Metropolitan Hotel*, so that you can go from one to the other without going out. The last time that I was in New York, I went there and saw a very good comedy, entitled "Our Poor; or the Poor of New York."

It is needless to say that Americans are very fond of theatres, and they manage to attract in their country all the artistic stars, which they pay liberally. Patti, Irving, and many other artistic celebrities have made long stays in the United States. Americans are also very fond of lectures, and a good lecturer is certain to make a rich harvest.

One of those who has been very successful that way is the celebrated *du Chaillu*, the well-known African Explorer.

They are also great readers of newspapers, and all sorts of literary works. The large number of daily, weekly, and monthly papers that are printed in the United States is quite astonishing. In New York alone they exceed one hundred, among which are the well-known *Evening Post, the Daily Express, the Daily Tribune, Daily Times, Daily Sun*, and the famous *New York Herald*, so well-known in Europe since Mr. Bennett, regardless of cost, sent Stanley in Africa with the special mission of finding the great *Livingstone*.

As to *Commerce and Industry* I shall say little, because it is a well-known fact that that it is so enormous, that all the other nations do not know what to do to keep their supremacy. The Americans are so industrious, and so quick in finding the merit and utility of new inventions, that no time is lost in the manufacture of new machines and their application to industry, and they will soon contend successfully with similar articles of European make. Even at this moment Paris and London stores are crowded with American machines of all descriptions. As to natural products, Europe would famish if it were not for the corn sent from that country.

Cotton, sugar, pork, meat, are amongst the principal articles of exportation. In consequence of its great area

of territory comprising all the climates, from very hot, as in Louisiana and Florida, to the extreme colds of the Northern States, America can grow everything in its own territory, and can dispense entirely with all the commodities of the rest of the world. This is an immense advantage for that country.

In New York, the summers are excessively hot, and many are the deaths produced by sunstrokes. In winter the cold is sometimes very hard to bear, and lasts long; but nevertheless, the climate may be considered as very healthy, especially for persons who inhabit the central and northern parts of Europe.

Its population is cosmopolitan, English, especially Irish, German, Italian, Spanish and French, being the more conspicuous. In fact, we may say that the *North American* belongs to a new race, formed by the mingling of nearly all the European races, and what is very remarkable, is the type of this new race, by which, it can be easily recognised anywhere.

This mingling has produced a robust, active, intelligent new race, better fit to resist the struggles of life than the old ones.

Even the first settlers change in manners and character after a stay of some years in that free country. Their children are not recognisable, and the second generation constitutes the new race. I believe that this is due, not only to the distinct mode of living, the different climate, but also partly to the institutions of the country, which contribute greatly to the development of the active faculties. The same thing is going on in Australia; and I am certain that is also due to the same causes. In the old European and Asiatic countries, these modifications would require a much longer time, which somewhat tends to prove that without liberty, the progress and development of the active faculties in men is slow.

The French, Italian, and Spanish usually live near one another, the Irish are not very far off, and the Germans have also their special quarters, so that it is very amusing, when walking about, to hear all the principal European languages spoken there. But this lasts only for a time. It is true that these parts of New York are always occupied by the same representatives of these nationalities, but most of them are new arrivals. After a time, if they remain and marry in the country, the evolution soon takes place, and they

become *Americans*. It is all these people who have made the *United States* what it is, one of the first countries of the world, and it is for that reason that I believe that it is wrong to stop the emigration of Irish, Italians, or others as they have done lately. You can never know if amongst these paupers of to-day, may not be present some members who, at a given time, will contribute to the greatness and prosperity of their adopted country.

The United States possesses immense territories, where hundred of millions can live easily. Therefore it would be much more rational that the American people, some of whose ancestors were in no better position, when they arrived in that wonderful country, than the new emigrants, should assist in every way in their power, with money and otherwise, all those who emigrate to their country. It is a sort of merchandise which has no market value, and when wanted, it cannot be had at any price; the Central and South American Republics would give much for such a supply of voluntary emigrants in their countries. The fact alone of having selected the United States as the place of their migration speaks in their favour. If they have done so, it is because of the great fame that the United States have in Europe. They consider it as the *free country* open to all.

Possibly among these pauper emigrants may be found some bad seeds of no value to the country, but they are sure to disappear quickly, and only useful members will remain.

In a country like the United States bad seeds cannot prosper, the competition is too keen, and only the more active and industrious succeed.

If I am permitted to give my humble advice to the great country, I shall say to its inhabitants:—

Do not make any distinction between rich emigrants or paupers who select your country as their own. Receive them all alike and with kindness. The rich ones, help them with your experience; the poor ones, help them with money and clothes. Send them to the West, grant them lands, supply them with all the requisites necessary for them and their families, to keep their lives and spirits in good condition, until they can subsist by themselves. By so doing, you will benefit them and yourselves. In due time, these families, in one way or another, will repay you fully the kindness lavished upon them, will become faithful American citizens, and will contribute to the further development of your grand country.

Another advice, which I shall take the liberty to give to

the North Americans, and to all others who may care for it, is that *Free Trade* ought to be the motto of all its inhabitants.

Excepting *Spirits, Tobacco* and *Cards*, or the like, which ought to produce enough to defray all the expenses necessary to the development of the country, and for maintaining internal peace and order, all the rest ought to be FREE. Even Justice ought to be free, the salaries of Judges, Barristers, and others, paid from the revenues produced by the three above-mentioned dutiable articles.

Everything free, excepting those three articles, which are *luxuries*, and from which all the sums required for the administration of the Government ought to come. *It is a trial well worth making, by the great American nation.*

I am perfectly certain that all those who smoke, drink, or gamble, would submit to the change with good grace. Even if the price of these commodities was forcibly raised, these persons would still be benefited by it; because if the sale of these commodities was made by agents of the Government they would be more certain to get a better quality for their money, than what they get at the present moment.

There is also another American question of great interest; that of the Indians, the former possessors of the soil. I think that all means ought to be taken for the education and preservation of what remains of this interesting race of people. By experience I know that these pure Indians possess many good qualities, and if instruction was freely given to them, it is probable that they could fill with honour and merit the most exalted positions. *Benito Juarez*, a pure Indian, born in *Istlan* or *Villa Juarez*, a small mountainous town at about thirty miles from Oaxaca, from pure Indian parents, can be cited as an example. *Don Porfirio Diaz*, the clever President of the Republic of Mexico, is another. *Mejia*, the celebrated faithful General of Maximilian, was a pure Indian. Hundreds more of eminent men, dead or alive could be mentioned; but these three are sufficient, and no reasons exist why a great many more of them should not turn out so. Therefore, as I said before, everything ought to be done to educate the children of these Indians at the cost of the country, for their benefit, as well as for that of the country.

Now I shall leave these digressions, and return to my general subject, that of New York.

What attracted my attention in that city, was the large number of *Bar rooms* which exist in all parts of the city. I

was quite surprised to see that in all these places, many dishes containing bread, cheese, pickles, and other articles of food were placed on the counter.

I saw the people freely partaking of them without any payment asked. I inquired how it was, and the reply was that it was the general custom to do so, and that it was a lure to excite customers to drink. Nevertheless many had the habit to have a good lunch at a cost of a few pence, for the glass of beer or whiskey in which they indulged at the time, and I thought that it was not such a bad thing for the poor.

In 1854, there was a Great International Exhibition in New York. If I remember well, the Exhibition took place in a fine Crystal Palace somewhere, where now stands CENTRAL PARK. I have still in my possession a water colour of the Palace. Many times I went there. The price was fifty cents. Being the first International Exhibition that I saw, I was much delighted with the innumerable good works of arts and industry which I saw there. The machines, which were also very numerous, attracted my attention. Many new ones were exhibited. One of them, a miniature electric boat, exhibited by a Frenchman, Mr. Vergès, was one of the greatest attractions. It was exhibited in the middle of a small artificial lake, and every day the inventor worked his model round the lake as long as he wished. It was considered a great success, and I believe that a Company was formed for the building of a real ship, which was done in due time; but the results were not quite satisfactory, and it was abandoned. However, the idea has not been lost, and electricity is now used as a motor for steamers and for many other purposes. The same inventor also established some electric baths as a remedy to nervous diseases, but it also turned out a failure.

I visited also the Barnum Museum. At that time it was not what it has been afterwards; but, nevertheless, it was very interesting. It contained a large menagerie, collections of natural history, Mammals, Birds, Reptiles, Insects, and the like; also a fine collection of Chinese curiosities. The price of entrance was one shilling. Attached to the Museum was a theatre, for which an extra fee had to be paid.

From that time to his death, Barnum, of celebrated memory, augmented his Museum and Menagerie in a remarkable manner, and made a large fortune. Several times the Museum was burned; but shortly after a new and larger

one was rebuilt. Everyone in London will surely remember his visit to that city.

I also made the acquaintance in New York of the world-renowned celebrated artist, *Madame Adelina Patti*. At that time she was a charming young girl, aged twelve, and was already known as a great pianist. She had the fresh voice of a nightingale and was very much courted for private concerts. Great expectations were expected from her, which have been fully realized as everyone knows.

I had the pleasure to hear her very often, and, of course, I appreciated and enjoyed immensely the hours spent in her company. Later on, I have enjoyed many charming soirées in Paris and in London, where I saw her in all her principal characters, in the *Somnambula*, *Marta*, *la Traviata*, etc., etc., but I never forgot the happy time of our first acquaintance.

In my several visits to New York, I visited all the Museums, I assisted to the meetings of several scientific Societies, either at New York or in Brooklyn, and I made the acquaintance of many good men. *Professor Schaup*, Entomologist, *Mr. C. Bland*, Conchiologist, *Mr. George Lawrence*, Ornithologist, *Captain Dow*, Explorer, *Professor Baird*, and many others, with whom I have passed some delightful hours.

I also made the acquaintance of many dealers in objects of natural history, *Bell*, *Wallace*, and several others in New York, *Akhurst*, in Brooklyn, *Alexander* in Hoboken; and I made some valuable purchases in bird's skins and insects in their stores. I secured some rare species of birds from Ecuador and British Guiana; also some very rare Coleoptera from Columbia.

In the vicinity of New York I collected many insects and a few birds, among which, the beautiful humming-bird, *Trochilus colubris*, a very important species so far, as being the one on which the genus, *Trochilus*, of Linné, is based, which has been employed by Naturalists for the family of TROCHILIDAE, and which I have also employed for my order TROCHILI, for these birds.

It is a beautiful creature, only $3\frac{1}{2}$ inches in length, bronzy-green on the upper surface, with the chin black, the throat metallic ruby-red, and the rest of underpart white. It has been put in five distinct genera, but is now universally known as *Trochilus colubris*; *Red-Throated Humming Bird*, and *Red-Throated Honey Sucker*, in English, *Rubis*, *Petit Rubis*, *Petit Rubis de la Caroline*, etc., in French Its nests are in the neighbourhoods of New York.

In the centre of the city is Union Square, a lawn enclosure shaded by trees. Here the great attraction was the large number of English sparrows imported a few years before 1852. These birds have propagated so rapidly, that I think they are considered now as a nuisance, but at that time they were the pets of the New Yorkers, who had small wooden boxes fixed to the trees, for their special use. In several parts of the country I have seen similar boxes, but larger, fixed on trees, for squirrels.

Many were the excursions that I made during my stay in New York.

Brooklyn, usually called the *City of Churches*, was the first that I visited. Ferry boats are constantly crossing from New York to Brooklyn. It is a matter of several minutes, and the cost is one penny. These boats are very large, the centre is reserved for cars, carriages, and horses. Two lateral galleries with benches run along the sides, and are reserved for pedestrians. One of them is reserved for the special use of ladies.

Brooklyn is a large town, which now contains over 900,000 inhabitants. In 1853 it was the meeting place of the Irish, and I have witnessed several fights between many thousand of them, and as many Americans.

Many churches and cemeteries exist in Brooklyn. The United States Navy-yards, Barracks for the Marines, and Hospital are also situated here. It is the residence of many merchants of the City, also of many Germans and Irish. Numerous detached Villas, built in the English fashion, are seen in all directions.

Prospect Park is a fine ground, well laid and much frequented.

Another favourite place where I went fishing, was *Governor's Island*, not far from the Battery. Fort Columbus, Castle William, Fort Lafayette, and Fort Richmond are all built on this Island, and defend the entry of the bay.

On the other side of the port, or Hudson River, are the two large connected towns of Jersey City and Hoboken, which in 1853 were only small villages.

Ferry boats take you there in about twelve minutes, and start every fifteen minutes. The fares are very cheap, averaging one-and-a-half pennies. These annexes of the Imperial City are increasing prodigiously, and are beautifully laid out. They are great resorts for holiday makers. On Sundays, the ferry boats are crowded with passengers. Many

other neighbouring places can be reached by these boats: *Astoria, Bay Ridge, Blackwell's Island, David's Island, Greenpoint, Harlem, Hart's Island, Hunter's Point, Randall's Island, Staten Island, &c., &c.* Charming excursions can be made in all of them, and the scenery is very picturesque, but the best of all, is to ascend Hudson River as far as the precipitous rocks known as the *Palisades*. It is a delightful trip. I remember an excursion which I made on the river in autumn. It is impossible to describe adequately the wonderful aspect of the trees on the margins of the river. What a variety of colours, with their foliages, from dark green to gold and silver. When lighted by the sun, the aspect of this autumn vegetation is fairy-like. The boats which ascend the river are large, comfortable, and magnificently ornamented. A very good restaurant is installed on board, and supplies excellent dinners. Bands of music play alternately, and dances are improvised. In fact, they can boast of all the comforts unimaginable for passengers, and I have never seen the like in England or in France.

At night, the aspect of these boats ascending or descending the rivers, with all their windows brilliantly lighted, the bands of music playing, the young folks dancing, is so beautiful, that they leave a most pleasant and never-to-be-forgotten impression.

From all that precedes, it may be supposed that life is very expensive in New York; but it is not so. Many are the second-rate hotels, very good of their kind, kept by French, Italian, German, and others, where board and food can be had from four to six shillings a day. They are much patronized by persons of these nationalities, and are sometimes preferred for their cooking to the most expensive.

Now, if you live in your own house you can do so, at a moderate price, provisions of all kinds being usually abundant and cheap. You can enjoy all the luxuries of life with about the same income as that required in Europe. Some things may be somewhat dearer, but it must be remembered that the wages are also higher than in Europe. A good workman will always command wages from two to four dollars per day. One dollar is usually paid to new or inferior workmen.

In the streets, it is impossible to distinguish a manual workman from a lawyer, banker, merchant, or the like. All of them dress with frock coats and chimney-pot hats, as they are called in London.

In the offices, or yards, they don their work clothes.

When their work is done they leave these in the offices, or workshops, wash themselves, and put on their frock coats and hats. I do not mean to say that there are no exceptions, but then they are new arrivals, passengers, or vagabonds. Of these last, many are to be seen in New York as anywhere else; but it is due chiefly to their idleness, and I advise all travellers to let them alone. It is not prudent to make any acquaintances in the street.

The aspect of the City on week-days is that of febrile activity, resembling somewhat that of the City of London. Everyone seems to be very busy, and running more than walking. Even in *Broadway*, the traffic is so dense, that the loungers cannot stroll about at will. Now with the men or women offering their ware for sale, the cries of the newspaper boys, the clerks hurrying on their errands, and not caring whom they jostle, it seems as if you were in a City inhabited by madmen, and if you do not keep your eyes wide open, a knock-down, or the loss of some objects of value will be probably your fate.

CHAPTER XIV.

IS AMERICA part of the ATLANTIS of the Ancients? — The first European Discoverers of that Continent—Prophecy of TASSO of the Discovery of America by CHRISTOPHER COLUMBUS—European Expeditions in North America—Discovery of *Labrador* by SEBASTIEN CABOT—*John Verrazani*, the first Discoverer of *North Carolina* and the harbours of *New York* and *Newport*—Discovery of *Virginia* by Captain *Philip Amidas* and *Arthur Barlow*, acting for SIR WALTER RALEIGH—Colonization of *North America* by the ENGLISH.

IS America part of the Continent known by the Ancients as *Atlantis*, or is it a separate Continent? To that question it is impossible to reply satisfactorily, and it is also very difficult to say if *America* is a very old Continent, or was formed later on, than the one we know, as *Europe*, *Asia*, and *Africa*. But many geological facts tend to prove that if *America* is not entitled to be called *the Old Continent*, it is unquestionably as old as the other one, and the name of new Continent can only be applied to it, with the meaning, that its discovery is relatively new to Europeans, Asiatics, and Africans.

Many are the probabilities that the actual America formed part of the *Atlantis*, or was at least very close to it, and that communications existed between the two.

Many are the suppositions that have been made about that wonderful part of the World.

The Reverend Father Charlevoix thinks that Noé himself landed in America. Old Spanish authors were of opinion that the fleet, which brought a rich cargo of gold to Palestine in the year 996 before Christ, had come direct from the Island of *Santo Domingo*, the same island that *Christopher Colon* discovered in 1592, and which he thought was the OPHIR OF SOLOMON.

Seneca himself, one of the great philosophers among the Ancients, in one of his writings, made the following remarkable prediction:—

. . . Venient annis.
 Saecula seris, quibus Oceanus.
 Vincula rerum laxet et ingens.
 Pateat tellus, Typhisque novos.
 Detegat orbes nec sit terris.
 Ultima Thule. . . .

(Medea).

“One day will come, after many centuries, when the Ocean, breaking its bonds, Typhis will show to men a new universe, then Thule will be no more the last land found in the West. . . .”

What a singularity that the name *Thule*, cited by Seneca, should coincide so well with the celebrated *Tullan*, or *Tula*, founded by the great *Quetzacoatl* of the Mexicans, and adored by them as a god after his death. If Seneca meant *Iceland*, by *Thule*, which is always the traduction given of it, it is not less singular that the Islanders have also been considered as the first European discoverers and settlers of North America, and what is more natural that they should have been the builders of that celebrated city of *Tullan*, or *Tula*. Now the *Chinese* also claim to be the discoverers of *America*. One of their historians, *Vossius*, mentions the fact in his writings. Nothing more easy, when we consider that they knew the compass 150 years before our Era.

Then, if we come to epochs nearer to us, we have positive dates about the voyages made to several parts of North America by *Leif*, son of *Erick the Red*. This was at the beginning of the eleventh century. He and his brothers discovered several countries, which they named *Helluland*, *Markland*, and *Vinland*.

The widow of *Thornstein*, the third son of *Erick the Red*, married a rich *Iceland* merchant, and went with him to *Vinland* in 1007.

In 1112, *Erick Upsi*, was nominated Bishop of *Iceland*, *Greenland*, and *Vinland*.

Up to 1347, constant communications existed between these countries, but in consequence of the cholera, which reduced the population of Norway from two millions to three hundred thousand inhabitants, the emmigration to the new countries ceased entirely, and the communications between them stopped; but the tradition of these lands was faithfully kept by the *Norwegians*, as mentioned in the SAGA OF KING OLAUS.

In 1570, *Madok*, Prince of Wales, son of the King *Owen Guyneth*, after the death of his father, threw up his share of succession, made several voyages of discovery, and landed in America. He established a colony at ACAZUMIL, supposed to be situated somewhere in the north of America.

In 1390, according to *Matthias Quadrius* and *Antonio Maginus*, two historians of the epoch, *Antonio Zeno*, a patrician of Venetia, is said to have landed in that part of

America known as *Labrador*. It was inhabited by people who traded with Greenland and Iceland. They sowed corn and made beer. There is a tradition that they had some knowledge of the latine tongue, and that several books in that language were found in the library of one of their kings.

The *Basques* and *Bretons* have also been considered as frequenters of North America at about the same time.

Now, I quote under, the following stanzas of TASSO, in which, speaking of Hercules, he prophesies the discovery of America by Christobal Colon :—

*Non oso di tentar l'alto Oceano
Segnò le mete en troppo breve chiostri,
L'ardir ristringse dell'ingegno umano,
Tempo verra che fian d'Ecole i segni
Favola vile ai naviganti industri
Un uom della Liguria, avra ardimento
All'incognito corso esporsi in prima.*

Tasso xv. 25, 30-31.

It is impossible to name *Christobal Colon* more explicitly than this.

In August, 1492, Christobal Colon embarked at Palos (Spain), and on the 12th of September of that year discovered *Hayti*, one of the islands of the Antillae.

That great discovery, which revolutionized the world, was considered of such importance that Spain, Portugal, France, England, Holland, and other countries sent numerous expeditions to the Continent discovered by Colon, and called *New World*.

CABOT, VESPUCCI, PINZON, NIÑO, CORTEREAL, HOGEDA, NICUESA, ANCISUS, COLMENARES, PEDRARIAS DAVILA, NUÑEZ, FERNANDEZ, CAIZEDO, MORANTES, IGNIGUEZ, GRIFALVA, PONCE DE LEON, MAGAGLIAN, CORTEZ, ALVARADO, QUARTIER, GUTIERREZ, PIZARRO, ALMAGRO, RIBALD, FORBISHER, DRAKE, CANDISH, SMITH, RALEIGH, MAHU, CORDES, HUDSON, SPILBERGEN, CORNELISZON, LEMAIRE, L'HERMITE, SCHAPENHAM, BREWER, and many others, explored AMERICA, and contributed greatly to our knowledge of that Continent.

Among all these distinguished travellers, SEBASTIEN CABOT is the one mentioned by all authors as the first who landed on the coast of Labrador (North America), on the 24th June, 1497; but it must always be remembered that LIEF ERICKSON visited that land five hundred years before.

The claim of England to her North American possessions

is founded upon Cabot's discoveries. These discoveries of Cabot induced the King of Portugal to send an expedition of discovery to America. The command was given to GASPAR CORTEREAL, from the Azores. This was in 1500. *Cortereal* explored the coast of *Labrador*. From a second voyage, which he made in 1501, he never returned.

In 1508, a mariner of Dieppe, Aubert, sailed to Newfoundland and brought home with him a native of that country, who was presented at the Court of France.

In 1524, John Verrazani was sent to America by *Francois Ier*. He reached the shores of *North Carolina*, and coasted north to the latitude of fifty degrees, exploring on his way the harbours of NEW YORK and NEWPORT. THEREFORE HE MUST BE CONSIDERED AS THE FIRST DISCOVERER OF THAT PART OF AMERICA.

In 1534, JACQUES CARTIER, or QUARTIER, explored the coast of Newfoundland. In 1535, he entered the gulf of St. Lawrence, and he may be considered as the DISCOVERER OF CANADA; but the first that made an effective settlement in that country was SAMUEL CHAMPLAIN.

The settlement of *Nova Scotia* was made by Mr. DE MONTS, who founded *Port Royal*. The first expedition to *Florida* was made by PONCE DE LEON, in 1512. He was appointed by the Emperor, Governor of that country.

After him, PEREZ DE ORTUBIA, VASQUEZ DE AYLLO, PAMPHILO DE NARVAEZ, ALVARO NUÑEZ, FERDINAND DE SOTO, and TRISTRAN DE LUNA, also visited Florida. They fought many battles with the Indians, and sustained considerable losses, resulting in the abandonment of the country for a considerable period, during which the French made repeated attempts to form settlements on the western coast. RIBAUT built the fort of Carolina on the site of Port Royal, and found the Indians peaceful and ready to help him. Under the reign of the SPANISH KING, PHILIPP II., *Pedro Malendez de Avila* was sent to dispute the possession of *Florida* to the French. He commanded a fleet of eleven vessels and 2600 men. He sailed from *Cadix* the 29th of June, 1565, and succeeded in recapturing Florida.

The Spaniards were then the only occupants of American soil, but the English had not abandoned their claim, founded on the discovery of Cabot.

In the reign of HENRY VIII., *Mr. Robert Thorne*, a Bristol merchant, left the Thames on the 20th of May, 1527, but nothing came out of that expedition.

In 1536, another gentleman named Hore was not more successful.

In 1553, *Sir Hugh Willoughby*, commanding three ships, sailed for America, but with the exception of the ship commanded by the pilot, *Richard Chancellor*, they all perished miserably from the effects of cold and hunger on a barren and uninhabited part of Lapland.

Richard Chancellor was more fortunate, and reached Archangel, from whence he went to Moscow, in Russia, and returned to England.

Forbisher was the next who sailed on the 11th of July, 1576, and reached Labrador, where one of his seamen discovered gold accidentally, and was the means of inciting the Government and private individuals to undertake new voyages of discoveries.

Forbisher undertook several voyages, more in search of gold than for making new discoveries; but he did not succeed. Later on, he accompanied *Drake* in his expedition to America and round the world.

In 1583, *Sir Humphrey Gilbert* sailed with five ships, and reached *Newfoundland* on the 30th of July. On entering *St. John*, in the Queen's name, he took possession of the harbour and two hundred leagues each way, and he established a sort of colony there. Then he proceeded on a voyage of discovery to the south; but he never reached England again. Near the Azores his small frigate, the *Squirrel*, and all within, were swallowed up by the sea, and never more heard of.

In 1584, *Sir Walter Raleigh*, a relative of *Sir Humphrey*, procured the renewal of the patents conferred to *Sir Humphrey* by QUEEN ELIZABETH, and sent out two ships, commanded by Captains *Philip Amidas* and *Arthur Barlow*, for the purpose of discovery. They discovered a new land, on the coast of Florida, which was named VIRGINIA, in honour of QUEEN ELIZABETH, and a colony was established there, but nothing came of it.

The next attempt at colonization was made by *Captain Gilbert* in 1602. He reached the northern part of Massachusetts. He continued southwards and came to a promontory, which he named *Cape Cod*. More south, he arrived at a point which he called *Gilbert's Point*, and he discovered an Island which he named *Elizabeth's Island*, in which he built a house and a fort, leaving twenty men there; but they soon abandoned the place and returned to England.

In 1605, the EARL OF SOUTHAMPTON and LORD ARUNDEL equipped a ship and sent her to New England, under the command of *Captain George Weymouth*. He explored the coast from the *Penobscot* to the *Hudson*. Not far from the mouth of the latter river, he entered a good harbour, which was called *Pentecost Harbour*. He then returned to England.

The colonization of North America by the English commenced in the beginning of the seventeenth century, under the reign of JAMES I. *Hakluyt*, *Sir Ferdinand Gorges*, *Sir John Popham*, and *Captain John Smith*, were all, and at the same time, directing their efforts to the same object. They united together, inviting others to join them in petitioning the King for a patent to raise a Company for the settlement of colonies in *Virginia*.

This petition was favourably received, and on the 10th of April, 1606, letters patent were issued, granting them all the territories in America lying on the sea coast between the 34th and 45th degrees of latitude. The patentees were divided into two companies, the southern comprising Londoners, and the northern composed of adventurers from Plymouth and Bristol.

The London Company fitted three small vessels, under the command of *Captain C. Newport*, who sailed on the 19th of December, 1606. The squadron, after four months' voyage, was driven into *Chesapeake Bay*. Here he discovered and named Cape Henry. After coasting about for some time, they entered a river, called by the natives *Powhatan*. They made a settlement there, which they called *Jamestown*, in honour of their King. This town is the oldest English settlement in America.

Captain Smith, one of the adventurers, a member of the Council of Administration, and whose name will ever be associated with the establishment of civilized society in America, descended from a respectable family of Lincolnshire, and was wealthy. Entering upon the direction of affairs he fortified Jamestown. Supplies being cut off from England, and the savages refusing to supply them with more, he put himself at the head of a company of his people and advanced into the country. By his affability to the well disposed tribes, and by repelling vigorously the others, he obtained abundant supplies for the colony. But in the midst of his success he was made prisoner, and would have been executed by the Indians if it had not been for *Pocahontas*, the King's

favourite daughter, who threw her arms round the prisoner and declared she would save him or die with him. Smith was released and returned to Jamestown.

After a certain time spent in discoveries and visits in every inlet and bay, on both sides of the Chesapeake, from *Cape Charles* to the river *Susquehannah*, he came back, bringing an ample and accurate account of his researches, and a map which has been the groundwork of all posterior ones.

By his liberality, wisdom, and courage, Smith inspired the Indians with the most exalted opinion of himself and of his country.

Subsequently, he received a dangerous wound from the explosion of some gunpowder, which obliged him to proceed to England for surgical aid, and he never returned to Virginia; but the honour of having been the true leader who planted the Anglo-Saxon race in North America rests with him.

From 1610 to 1756, the colony continued to grow, favoured by several circumstances, as the increasing use of tobacco in Europe, its remoteness from the Spanish and French settlements in Florida, and in Canada, and its central position, which protected it from savage incursions. The soil being fertile, the natural productions, both animal and vegetable, being abundant, and the means of existence easy, the people enjoyed unusual prosperity. The same can be said of the English settlements of MARYLAND, MAINE, NEW HAMPSHIRE, MASSACHUSETTS, PROVIDENCE and RHODE ISLANDS, CONNECTICUT, etc.

CHAPTER XV.

First Settlements in *New York* by the DUTCH—Wars between the DUTCH and the ENGLISH—Old Description of NEW NETHERLAND and NEW AMSTERDAM—Of the Country and its Natives—Inhabitants—Their Customs—Vegetable and Animal Life—Mineral Ore—Definitive Occupation of NEW NETHERLAND and NEW AMSTERDAM by the ENGLISH—War of Independence—Treaty of Peace signed by the ENGLISH and the NORTH AMERICANS—Declaration of Independence of the UNITED STATES—GEORGE WASHINGTON elected *President of the United States*.

THE first who entered the harbour of New York was *John Verrezani*, in 1524, as I mentioned before. In 1609, *Henry Hudson*, an Englishman, in the service of the Dutch East India Company, sailed from the Texel in the frigate, *Half Moon*, with instructions to seek for a passage from America to China. He landed first at *Newfoundland*, and from that place, he continued southward and arrived at a great river (the Hudson of to-day), which he ascended to a good distance. On its banks, he met some men robed with buffalo skins. From there, he returned safely to Amsterdam.

The narrative of his expedition determined many Dutch merchants to prepare several expeditions, with the object of establishing firm settlements in that part of America, for which purpose they obtained letters patent in 1614, granted to them by the States in the Hague:—That they might only traffic to *New Netherland*, as the place was called by the Dutch Government. In that same year a colony was sent and a fort was erected on the western bank of the river, near Albany, and its government was entrusted to *Henry Christaens*. This feeble settlement was scarcely established when *Sir Samuel Argal*, Governor of Virginia, came to dispute them possession of the land. And although they pleaded that they had bought all Hudson's rights and interests in the country, as well as all his maps, they obliged the Dutch Governor to surrender his command, and pay a tribute to the government of Virginia. The States of Holland, fearing to offend a new and powerful ally, submitted to those terms for a while; but soon after, a new governor, *Jacob Elkin*, was

sent, and from that time, they not only failed to pay the promised tribute, but constructed a second fort on Long Island, and subsequently two others, one on the Connecticut River, the other at Nassau. They also built the town of *New Amsterdam*, and for a series of years, being unmolested, they increased in number, and by the exertion of their peculiar national virtues of patience and industry, they subdued all the difficulties inherent to the making of a new colony.

In 1620, the States of Holland established the West India Company, and committed to it the administration of New Netherland. This determination was carried out the following year, and under the management of the Company the new settlement was soon both consolidated and extended. Their capital was *New Amsterdam*, built on *Manhattan Island*.

The extent of territory claimed by the Dutch, as has been represented by some of their own writers, was from *Virginia* to *Connecticut*. Whatever might have been its titular extent, the planters hastened to enlarge their occupations far beyond their immediate use, and by their intrusions into the Delaware and Connecticut countries, laid the foundation of their future disputes with the colonists of these parts.

Complaints having been made to KING CHARLES, by his Ambassador, he represented to the States to disown the whole business, and to declare that it was only a private undertaking. Whereupon a Commission was granted to *Sir George Calvert* to take possession and plant the southern parts, lying towards *Virginia*, by the name of *Maryland*, and to SIR EDMUND LOYDEN to plant and do the same with the northern parts by the name of *Nova Albion*, which makes the Dutch, for the second time, willing to compound, and for the sum of two thousand and five hundred pounds sterling they offered to go away and leave all their chattels.

But in consequence of the troubles which began and continued for a time in England, they not only rescinded their first proposition but made higher demands.

In May, 1664, after the Restoration, the King considering that the territory called *New Netherland* belonged rightfully to England, designed four Commissioners, COLONEL RICHARD NICHOLS, SIR ROBERT CARR, GEORGE CARTWRIGHT, and SAMUEL MAWRICK, to settle that affair. They had three ships of war to effect their purpose. First they landed at Boston, and from that place went to New Netherland.

They soon reduced the town and fort of New Amsterdam upon conditions advantageous to his Majesty and easy for the Dutch.

I subjoin here a very old description of that country and of *New Amsterdam*.

“It is placed upon the neck of the Island *Manhattan*, looking towards the sea, encompassed with Hudson’s River, which is six miles broad; the town is compact and oval, with very fair streets, and several good houses; the rest are built much after the manner of Holland, to the number of about four hundred houses, which in those parts is held considerable.

Upon one side of the town is *James’ Fort*, capable of lodging three hundred soldiers and officers; it has four bastions, forty pieces of mounted cannon; the walls of stone have a thick rampart of earth; well accommodated with a spring of fresh water. Distant from the sea seven leagues, it affords a safe entrance even to unskilful pilots; under the town side, ships of any burthen may ride secure against any storms, the current of the river being broken by the interposition of a small island, which lies a mile distant from the town.

About ten miles from the town is a place called *Hell’s Gate*, which being a narrow passage, there runneth a violent stream both upon flood and ebb, and in the middle lie some rocky Islands, which the current sets so violently upon, that it threatens present shipwreck, and upon the flood is a large whirlwind which continually sends forth a hideous roaring, enough to fright any stranger from passing further, and to wait for some *Charon* to conduct him through, yet, to those that are well acquainted with the place, there is little or no danger. It is a place of great defence against any enemy coming that way, which a small fortification would absolutely prevent and oblige them coming in, at the west of *Long Island*, by *Sandy Hook*, where *Nutten Island* forces them within the command of the Fort, at New Amsterdam, which is one of the best pieces of defence in the north parts of America. The inhabitants have a considerable trade with the Indians for beaver, otter, and racoon skins, with other furs, as also for bear, deer, and elk skins, and are supplied with venison and fowl in the winter, and fish in the summer, by the Indians from whom they buy these commodities at an easy rate.

The *Manhattan*, Great River, being the principal, having two mouths, wash the mighty island *Watonwaks*, and falls into the Ocean. The southern mouth is called *Port May*, or *Godnys Bay*. In the middle thereof lies an Island called the *Staten*

Island, and a little higher the *Manhattan*, so called by the natives which dwell on the east side of the river. They are a cruel people and enemies to the Hollanders, as also the Sanhikans, which reside on the western shore. Farther up are the *Makwaes*, and *Mahicans*, which continually war one against another. In like manner all the inhabitants on the west side of the river *Manhattan* are usually at enmity with those that possess the eastern shore.

This country has many remarkable waterfalls descending from steep rocks, large creeks and harbours, fresh lakes and rivulets, pleasant fountains and springs, some of which boil in the winter, and are cold and delightful to drink in summer. The sea coast is hilly, and of a sandy and clayey soil, which produces abundance of herbs and trees.

The oak grows there from sixty to seventy feet, for the most part free from knots, which makes it the better fit for shipping. The nut trees afford good fuel. Some plants brought hither, grow better than in Holland itself, as apples, pears, cherries, peaches, apricots, strawberries and the like. The vines grow wild in most places, and bear abundance of blue, white, and muscadine grapes. Sometimes since, the inhabitants have made wine of them, which is not inferior to either Rhenish or French.

All manner of plants known in Europe grow in their gardens. *Water Melons*, *Calabasses* and *Pumpkins* are very abundant. The wheat, though six feet high, grows very speedily. *Peas* are gathered twice a year, *barley* springs above a man's height. *Medicinal herbs*, and *Indigo* grow wild in great abundance. In some places also, is store of mountain Crystal, and that sort of mineral which is called *Muscovia Glass*. Others afford marble, serpentine stone, gold and silver.

When Captain *William Clieff*, in 1645, employed the Indian Interpreter, *Agheroense*, to decide the differences which arose between the West India Company and the wild people called *Makwaes*, he observed him to paint his face with a yellow glittering colour, which he judged to be of some rich mineral, whereupon, buying some, of the said *Agheroeuse*, he put it into a crucible, and gained two small pieces of gold out of the same, valued at six shillings, but keeping it private and purchasing a great quantity of the said mineral, he extracted from it a good store of gold, which he sent to Holland in the *Arent Corsen*, of New Haven, but the ship was lost, and was never heard of afterwards, and the *Princess Pink*, in which *Captain Clieff* was,

with a large store of the new found mineral, being cast away also, it has always remained a mystery to the present time if it was really gold, and the exact place from where it came.

The inhabitants, though divided into several nations, agree in many things, as also in painting their bodies. Their shields, clubs, and other utensils are alike. They obtain the colours wherewith they paint themselves from a small plant, not unlike the myrtle, or of certain stones, ground into very fine powder.

The forests are inhabited by a large variety of animals, as hogs, black bears, harts and stags, deers, lions, musk-cats, beavers, otters, etc., etc. Towards the south of New Amsterdam are many buffaloes.

Fowls, turkeys, geese, ducks, pigeons, hawks, kites, cranes, storks, ravens, owls, swallows, goldfinches, quails, pheasants, and the like, are very abundant. Moreover, New Amsterdam breeds a strange bird, about a thumb long, full of glittering feathers; it lives by sucking of flowers, like the bee. (This is the humming bird *Trochilus colubris*).

The rivers and lakes produce sturgeon, salmon, carp, perch, barbils, all sorts of eels, and many other. The sea affords crabs, with and without shells; sea-cocks, sea-horses, cod, whiting, ling, herring, mackerel, flounders, turbot, tortels, and oysters, of which some are one foot long, and have pearl, but these are a little brownish.

Amongst the poisonous creatures which infest *New Amsterdam*, the chief and most dangerous is the *Rattlesnake*.

The inhabitants have their hair black as jet, coarse like horse-hair; they are broad shouldered, small waisted, have brown eyes, their teeth exceedingly white. With water they chiefly quench their thirst; their general food is flesh, fish, and Indian wheat, which stamped, is boiled to a pap, by them called *sappaeu*. They eat at any time when they have appetite. Beavers tails are amongst them accounted a great dainty. When they go to hunt, they live several days on parched corn, which they carry in little bags tied about their middle, a little of that corn thrown into water swells exceedingly."

Henry Hudson relates:—"That sailing in the river mountains he saw the Indians make strange gestures in their dancing and singing; he observed that they carried darts pointed with sharp stones soddered into the wood, that they slept under the sky on mats or leaves, took much tobacco and this very strong, and that though courteous and friendly they did not inspire him with confidence. Farther up he met with an old

Indian commander of forty men and seventeen women, dwelling in one house, artificially built of the bark of oak trees, round about it, lay above three ship-loads of corn and Indian beans to dry, besides the plants which grew in the fields. No sooner had Hudson entered the house than he was received on two mats spread on the ground, and two men immediately were sent to shoot venison or fowls, and instantly returning brought two pigeons and a fat hog, which they nimbly fleeced with shells, and was also laid down to the fire. They also made other preparations for Hudson's entertainment, but not willing to venture himself amongst them that night, tasted not of it, notwithstanding the Indians breaking their darts, threw them into the fire, that thereby they might drive away all fears and jealousies from him.

The women are more neat than the men, and though the winter pinches them with excessive cold, yet they go naked till their thirteenth year. Both men and women wear a girdle of whale-fins and sea-shells; the men put a piece of cloth, half an ell long and three quarters broad, between their legs, so that a square piece hangs behind below, and another before the belly. The women wear a coat, which comes half way down their legs, so curiously wrought with sea-shells that one coat sometimes cost many pounds. Moreover, their bodies are covered with deer-skins, the lappets or ends of which hang full of points, a large skin buttoned on the right shoulder, and tied about the middle serves for an upper garment, and in the night for a blanket. Both men and women go for the most parts bare headed; the women tie their hair behind in a tuft, over which they wear a square cap wrought with sea-shells, with which they adorn their foreheads, and also wear the same about their necks and hands, and some about their middle. Before the arrival of the Hollanders, they wore shoes and stockings of buffalo-skins, some likewise made shoes of wheaten-straw. The men grease their bodies and paint their faces with several colours, black, white, red, yellow, or blue; the women put here and there a black spot; both of them are very reserved. Their houses are most of them built of one fashion, only differing in length. They build after this manner: They set peeled boughs of nut-trees on the ground, according to the size of the place which they intend to build, then joining the tops of the boughs together, they cover the walls and the top with bark of cypress, ash and chestnuts trees, which are laid one upon another, the smallest side being turned inwards according to the size

of the houses ; several families, to the number of fifteen, dwell together, everyone having his apartment.

Their fortifications are built on steep hills near rivers; the access to them is only at one place. Within, they generally build twenty or thirty houses, of which some are one hundred and eighty feet long, all of them full of people. In the summer, they pitch their tents along by the riverside to fish. In winter, they remove into the woods, to be near their game of hunting, and also of fuel.

They generally have only one wife, but for the least offence the man can turn her out, and marry another. On breach of marriage, the children follow the mother. The women are very fond of their offsprings, and take great care of them. They make great lamentation at their death, especially for sons. They cut off the hair of their heads, which at the funeral is burnt in the presence of all their relations. They also perform the same when their husbands die; and besides, they blacken their faces, and putting on a hart-skin shirt, mourn a whole year. They bury the dead with a stone under the head; near it, they set various utensils, as pot, kettle, dish, spoons, money, and provisions, to use in the other world. When it is a chief, they build a conical hill on the grave.

The language of this country is varied. The principal tongues are the *Mannhatan*, *Wappanoo*, *Siavanoo*, and *Minqua*, which are all very difficult for strangers to learn. Their money is made of the innermost shells of a certain shell-fish, cast up twice a year by the sea. These shells they grind smooth, and make a hole in the middle, cutting them of an exact size, and so put them on strings, which then serve as money.

They have scarcely any religion ; they suppose the moon to have great influence on plants. The sun is called to witness whenever they swear. They stand in much fear of the Devil, and make offerings to propitiate in their favour, to the Evil One. They burn the first of what they hunt or fish, in his honour. They acknowledge the residence of a God above the stars; but they say they know him not, because they never saw him.

Concerning the souls of the deceased, they believe that those which have been good in their lifetime, live southwards, in a temperate country, where they enjoy all manner of pleasure and delight ; as to the wicked, they wander up and down in miserable condition. The cries of wild beasts in

the night are supposed to be the spirits of souls transmigrated into wicked bodies.

At their dancing matches, where all persons that come are freely entertained, their custom is, when they dance, for the spectators to have short sticks in their hands and to knock the ground, and sing altogether, whilst they that dance sometimes act war-like postures, and then they come in painted for war, with their faces painted black and red, or all black, or all red, with some streaks of white under their eyes, and so jump and leap up and down without any apparent order, uttering many expressions of their intended valour.

When their King or Chief sits in Council, he has a company of armed men as body guards, great respect is shown him by the people, which is principally manifested by their silence. After he has declared the cause of their convention, he demands their opinion, ordering who shall begin. The person ordered to speak after having declared his mind, tells them all that he has done, no man ever interrupting any person in his speech, nor offering to speak, though he make ever so many long stops, till he says that he has done. The Council having all declared their opinions, the King after some pause, gives the definitive sentence, which is commonly seconded with a shout from the people, everyone seeming to applaud and manifest their assent to what is decided.

When *New Amsterdam* surrendered to the English Commissioners, it contained about 3,000 inhabitants, of whom nearly one half preferred to return to Holland. The remainder continued in the Colony, and among them, the noble Governor, Stuyvesant, who survived a few years the fortune of his little empire, and left descendants, who held high rank in the city for many years after, and were also frequently elected to the Magistracy of New York.

The name of *New Netherlands* was changed into that of *Yorkshire*, and *New Amsterdam* into that of *New York*, *Fort Orange* into *Fort Albany*, etc., etc.

All the country having been conferred by patent upon His Royal Highness, the DUKE OF YORK AND ALBANY, His Royal Highness appointed Colonel Nichols, Governor of New York. He was the first Governor of that country, and his administration was wise and beneficial.

In 1666, Holland being at war with England, it was feared that the Dutch would try to recover New York, and *Colonel Nichols* was advised to put the city in a state of defence, which he did thoroughly, but the Dutch never attempted to recover

their former possession, and, in July 1667, it was formally ceded to England in exchange for their colony of SURINAM.

Colonel Nichols resigned soon after, and was succeeded by *Colonel Lovelace*, who successfully administered the country during six years.

The second war with Holland in 1672, together with the news of the Duke of York's profession of the Catholic faith, produced a discontent in the colony, which led a large number to abandon the city and settle in *Carolina*.

A small fleet sent out from Holland approached New York at a time when the Governor was absent, the city was under the command of *Colonel Manning*, who surrendered the place to the Dutch without firing a single gun. The Dutch inhabitants were elated with triumph, and the English had no cause of resentment, but in the conduct of their pusillanimous commander. The Dutch were not long in regaining their former supremacy, but the triumph of the one, and the mortification of the other did not endure long. Early in the spring of 1674 the controversy was terminated by the treaty of Westminster, by which New York was restored to the English. From that time to the 19th of April, 1775, the day of the battle of Lexington, the English retained possession of the country, which developed immensely under their rule.

From the 19th of April, 1775, to 19th of April, 1783, exactly eight years since the shedding of the first blood in the revolution at Lexington, the war of Independence continued with more or less fury during that time, and ended by the treaty of peace, signed at Paris on the 3rd of September, 1783, by *David Hartley* on the part of GEORGE III., and by *John Adams*, *Benjamin Franklin*, and *John Jay*, on the part of the UNITED STATES.

By the first article of this treaty his Britannic Majesty acknowledges the United States to be free, sovereign, and independent states, that he treats with them as such, and relinquishes for himself and heirs all claims to the government, propriety and territorial rights of the same. The second article defines the boundaries of the states, and the third secures them the right of fishing on the Grand Bank, and other banks of Newfoundland, and other places in the possession of the British, formerly used by the Americans for fishing-grounds. The fourth article secures the payment to creditors the debts heretofore contracted; whilst the fifth recommends to Congress the restitution of estates formerly belonging to British subjects which had been confiscated.

The sixth article prohibits any future confiscations. The seventh provides for firm and perpetual peace; the eighth secures the navigation of *Mississippi* to both Englishmen and Americans; the ninth orders all conquests made after the treaty of peace to be restored; the tenth provides for the ratification of the treaty within six months, which was duly done.

The different courts of Europe had already acknowledged the Independence of the United States.

A federal Constitution was formed, but not without opposition, and even insurrection. It took six years before it was ratified by the different States of the Union. Conventions were assembled in the several States to consider its provisions, and it took nearly a year before the requisite number had decided in its favour, and thus enabled Congress to take measures for organizing the new Government. At last it was done, and the illustrious and successful commander-in-chief of the American armies, GEORGE WASHINGTON, who had resigned and retired to his private seat, at Mount Vernon, was elected PRESIDENT OF THE UNITED STATES.

CHAPTER XVI.

Presidents of the United States since the declaration of its Independence:—Washington, John Adams, Thomas Jefferson, James Madison, James Monroe, John Quincy Adams, Andrew Jackson, Martin Van Buren, William Henry Harrison, John Tyler, James H. Polk, Zachary Taylor, Millard Fillmore, Franklin Pierce, James Buchanan, Abraham Lincoln, Andrew Johnson, Ulysses S. Grant, Rutherford Hayes, James Garfield, Chester Arthur, Grover Cleveland, Benjamin Harrison.

WASHINGTON.

HIS election, as President of the United States, was formally announced to him on the 14th of April, 1789. He accepted the office with unfeigned reluctance, occasioned by his love of retirement, and by tenderness for his reputation. As his presence at *New York*, then the seat of the Government, was immediately required, he set out from Mount Vernon on the 16th, the second day after he received notice of his appointment. His journey was a triumphal procession, such as no conqueror can boast. Since leaving his house, he was accompanied by a company of gentlemen from Alexandria, who entertained him in that town. The people gathered to see him as he passed. When he approached the towns the most respectable citizens came out to meet and welcome him, he was escorted from place to place by companies of militia, and in the principal cities, his presence was announced by the firing of cannon, ringing of bells, and military display. A committee of Congress, consisting of three members of the Senate, and five of the House of Representatives, was appointed to meet him in New Jersey, and attend him to the City of New York.

To Elizabeth-town Point, came many other persons of distinction, and the heads of several departments of the Government. He was there received in a barge, splendidly fitted up for the occasion, and rowed by thirteen pilots in white uniforms. This was followed by vessels and boats, fancifully decorated, and crowded with spectators. When the President's barge approached the city, a salute of thirteen guns was fired from the vessels in the harbour, and from the battery. At the landing, he was again saluted by a discharge

of artillery, and was joined by the Governor and other officers of the State and the Corporation of the city. A procession was then formed headed by a long military train, which was followed by the principal officers of the State and City, the clergy, foreign ministers, and a great concourse of citizens. The procession advanced to the house prepared for the reception of the President. The day was passed in festivity and in joy, and the city was brilliantly illuminated during the evening.

On the 30th of April, *Washington* solemnly swore that he would faithfully execute the office of President of the United States, and that he would, to the best of his ability, preserve, protect, and defend the Constitution of the United States, and the oath of office was administered to him on the balcony, in front of the Federal Hall, by Mr. Livingston, the Chancellor of the State of New York, in the presence of both branches of the National Legislature, and thousands of spectators. During the ceremony a profound silence prevailed throughout the whole of the assembled multitude, but no sooner had the Chancellor proclaimed him President of the United States, than he was answered by the discharge of thirteen guns from the battery, and the deafening cheers of thousands of grateful and affectionate hearts. *Washington* then retired to the Senate Chamber, and in an impressive speech addressed to his "Fellow-citizens of the Senate and House of Representatives," declared his reluctance to accept the high office which the people had thought fit to bestow upon him, his incapacity for the mighty and untried cares before him, and offered his fervent supplications to that Almighty Being, who rules over the universe,—who presides in the councils of nations,—and whose Providential aids can supply every human defect, that his benediction might consecrate to the liberties and happiness of the people of the United States, a Government instituted by themselves for these essential purposes, and might enable every instrument employed in its administration to execute with success the functions allotted to his charge.

At the conclusion of his remarkable address, *Washington* went to St. Paul's Church, where the service was read by the Bishop, and the ceremonies of the day closed. Tokens of joy were exhibited throughout the city, as on the day of his arrival, and in the night the whole place was illuminated, and fireworks displayed in almost every quarter.

At the first session of Congress, a law was passed

imposing duties on imported merchandise, and taxes on tonnage of vessels. Congress then proceeded to complete the Government by instituting an executive cabinet to be composed of heads of the different departments, of the treasury, of war, and of state. *Alexander Hamilton* was appointed Secretary of the Treasury, *General Knox* Secretary of War, and *Thomas Jefferson* Secretary of State. *John Jay* received the office of Chief Justice; the associate judges were *John Rutledge*, *James Wilson*, *John Cushing*, *Robert Harrison*, and *John Blair*. These were the first officers of Washington, and they raised for themselves a monument of fame, inferior only to that of their chief, and they are still gratefully remembered by an admiring country.

The second session of the first Congress commenced on the 1st of January, 1790. The President recommended several subjects as claiming their consideration, among which were: a provision for the common defence, the arming and disciplining of the militia, laws for the naturalization of foreigners, an uniformity in the currency, weights and measures, the advancement of agriculture, commerce and manufactures, the encouragement of new and useful inventions, the establishment of post offices and post roads, the promotion and patronage of science and literature, and the adoption of effective measures for the support of the public credit.

During this session, it was also decided that the seat of Government should be removed for ten years to *Philadelphia*, and then be established permanently at some place, on the *Potomac River*. The next year, during his southern tour, Washington selected the position for the future Capital, the duty devolving on him as President. Under his direction the territory was surveyed, the city planned and laid out, and the sites of the public buildings designated. The territory has since been called *District of Columbia*, and to the city was given the name of its illustrious founder.

In the year 1791, the first census of the United States was taken, when it appeared that the whole number of inhabitants was *three millions, nine hundred and twenty-one thousand, three hundred and twenty-six*, of whom 695,655 were slaves.

At the meeting of the second Congress at *Philadelphia*, the President congratulated them on the prosperous condition of the country, on the great success of the bank scheme, and on many other reforms made. The principal laws passed at this

session were those for establishing a uniform militia system, increasing the army, and apportioning the Representatives.

During the year 1792, *Washington* expressed a wish to retire from the cares of government, and proposed to decline a re-election. He had even prepared a farewell address to the people, but he was, however, persuaded by *Jefferson*, *Hamilton*, *Randolph*, and others, to relinquish his design, and was a second time elected President of the United States by the unanimous vote of the electors. *John Adams* was nominated Vice-President. From 1792 to 1796, several wars and rebellions took place, but by treaty or otherwise, peace was restored, and in September, 1796, *Washington* announced to the people of the United States his irrevocable decision of retiring from public life, and spending the remainder of his days in his peaceful and quiet retreat of *Mount Vernon*, where he died on the 14th December, 1799, aged sixty-eight years. *Mount Vernon* is situated at about fifteen miles from the capital, and is a place of pilgrimage to Americans and others. No one pass there without saluting the mausoleum containing the mortal remains of him who was called by the people "THE FATHER OF THE COUNTRY," by which name he is and will ever be known all over America.

JOHN ADAMS, 1797—1801.

JOHN ADAMS, the candidate of the Republicans, was elected President of the United States at the election of November, 1796, with Mr. JEFFERSON as Vice-President.

They were installed, in the presence of *Washington*, on the 4th day of March, 1797, and forthwith entered on the duties of their respective offices.

Ability of a very high order, an unsullied character, and important services rendered during the progress of the Revolution, entitled Mr. Adams to the dignified office to which he was elected. He published in 1765 his *Essay on the Canon and Feudal Law*, in which he expresses the boldest and elevated sentiment, in language most vigorous and animating, and says that America must be unoppressed or must become independent.

In June, 1774, he was elected Member of the Continental Congress, of which body, from the first, he was a distinguished leader.

In June, 1775, when he could have secured for himself the appointment of Chief Commander of the American armies,

he recommended George Washington to that all important post. Mr. Adams was one of the most earnest and influential advocates of the declaration of Independence.

During his time of office, war was declared between the United States and France, and various naval battles were fought, but an honourable peace was soon concluded between *Napoleon Bonaparte* and the envoys of the President, *M. M. Oliver Ellsworth, Patrick Henry, and William Van-Murray.*

In 1800, Congress met for the first time in Washington. In his address, the President, after congratulating the people upon having a permanent seat of government, continued: "It would be unbecoming the representatives of this nation to assemble for the first time, in this solemn temple, without looking up to the Supreme Ruler of the Universe, and imploring his blessing:—May this territory be the residence of virtue and happiness! In this city may that piety and virtue, that wisdom and magnanimity, that constancy and self-government which adorned the great character whose name it bears, be for ever held in admiration! Here and throughout our country, may simple manners, pure morals, and true religion flourish for ever."

The first term of Mr. Adams, as President, being about to expire, a new election was held.

It was not until the thirty-fifth ballot, that the friends of Mr. Jefferson succeeded in electing him.

THOMAS JEFFERSON, 1801—1809.

THOMAS JEFFERSON, elected President of the United States, took office on the 4th of March, 1801. His inaugural address is one of the most celebrated state papers which has ever proceeded from the pen of its writer. Here are some passages from it:—Equal and exact justice to all men of whatsoever state or persuasion, religious or poetical, peace, commerce, and honest friendship with all nations, entangling alliances with none, the support of the state governments in all their rights, as the most competent administrations of our domestic concerns, and the surest bulwarks against anti-republican tendencies, the preservation of the general government in its whole constitutional vigour, as the sheet-anchor of our peace at home and safety abroad, a jealous care of the right of election by the people, a mild and safe corrective of abuses which are lopped by the sword of revolution where peaceable remedies are unprovided, absolute acquiescence in the decision of the majority, the vital principle

of republics, from which there is no appeal, but to force, the vital principle and immediate parent of despotism, a well disciplined militia, our best reliance in peace and for the moments of war till regulars may relieve the supremacy of the civil over the military authority, economy in the public expense, that labour may be lightly burdened, the honest payment of our debts, and sacred preservation of the public faith, encouragement of agriculture, and of commerce as its handmaid, the diffusion of information, and arraignment of all abuses at the bar of the public reason, freedom of religion, freedom of the press, and freedom of the person under the protection of the *habeas corpus*, and trial by juries impartially selected. These are the essential principles of our government, and those which ought to shape its administration. These form the bright constellation, which has gone before us and guided our steps through an age of revolution and reformation. The wisdom of our sages and blood of our heroes have been devoted to their attainment, they should be the creed of our political faith, the text of civic instruction, the touchstone to try the services of those we trust, and should we wander from them in moments of error or alarm, let us hasten to retrace our steps, and to regain the road which alone leads to peace, liberty, and safety.

During the year 1801, a second census of the United States was completed, showing a population of *five millions, three hundred and nineteen thousand, seven hundred and sixty-two*, an increase of 1,400,000 in ten years. The enormous increase of exports, from 19 to 99 millions of dollars, and the corresponding augmentation of the revenue, from 90,000 to nearly 13 millions, can only be attributed to the liberal institutions of the country.

During his term of office, *Ohio* was admitted into the Union, and *Louisiana* was bought from the French at a cost of twenty millions of francs, or £800,000.

The Tripolitan war was also fought during the presidency of Mr. Jefferson.

On the 4th of March, 1805, Mr. Jefferson entered upon his second term of office. AARON BURR was succeeded in the Vice-Presidency, by GEORGE CLINTON of New York. In 1808, the President announced his determination to retire from office at the close of the term, and JAMES MADISON was nominated by the republican party to succeed him. Jefferson retired to his seat at *Monticello*, and passed the remainder of his life in literary pursuits.

It was during Jefferson's presidency that a measure proposed by him to Congress, on the 18th of January, 1803, was sanctioned: That of exploring the river Missouri from its mouth to its source, and crossing the highlands by the shortest passage, to seek the best water communication, thence to the Pacific Ocean. This exploration was successfully made by Captain Meriwether Lewis, assisted by Lieutenant Clarke.

They entered the Missouri on the 14th of May, 1804, and on the 1st of November took up their winter quarters near the Mandan towns, 1600 miles above the mouth of the river, in latitude $47^{\circ} 21' 47''$ north, and longitude $99^{\circ} 24' 56''$ west from Greenwich. On the 8th of April, 1805, they proceeded up the river in pursuance of the object prescribed to them. During his stay among the *Mandans*, Captain Lewis was able to lay down the Missouri according to courses and distances taken on his passage up, corrected by frequent observations of longitude and latitude, and to add to the actual survey of this portion of the river, a general map of the country, between the Mississippi and the Pacific Ocean, from the 33 to the 54 degrees of latitude. He also observed the customs, language, commerce, and other interesting facts respecting the Indian tribes inhabiting the territory of Louisiana, and the adjacent countries to its northern and western borders.

This was the first voyage of discovery made in the West, by order of the Government of the United States.

JAMES MADISON, 1809—1817.

JAMES MADISON, the fourth President of the United States, took office in March, 1809. GEORGE CLINTON being elected Vice-President.

One of the first acts of the Congress was to repeal the embargo law; but at the same time prohibiting all intercourse with France and England, in war at the time. In consequence of repeated hostilities committed by the English, war was declared against that country on the 18th of June, 1812. It was fought with great bravery on both sides, on land and at sea, and lasted during the whole of the first and part of the second term of office of President Madison.

After the repulse of the British troops from Baltimore and Plattsburg, and the capture of the English squadron on Lake Champlain, a treaty of peace was signed at Ghent, on the 24th of December, 1814, and was ratified by the Prince Regent of

England, on the 28th of the same month, and by the President of the United States, with the advice and consent of the Senate, on the 17th February, 1815.

A treaty, regulating the commerce between the United States and Great Britain, was signed in London on the 3rd of July, 1815, and ratified by the President on the 22nd of December, in the same year.

There was also a war between the Bey of Algiers and the Republic of the United States, which ended in 1815, in favour of that Republic.

The territory of *Indiana* was made into a State and admitted into the Union in 1816. In that year, the Republic prospered immensely,—canals were opened in various states, a national bank was instituted, and many thousands of emigrants—chiefly from Great Britain—arrived in the country.

In 1816, Mr. Madison's second term of office being about to expire, JAMES MONROE was elected to succeed him.

JAMES MONROE, 1817—1824.

JAMES MONROE, the fifth President of the United States, entered upon the duties of his office on the 4th of March, 1817.

During the year 1817 the territory of the Mississippi was enacted into a State, and admitted into the Union. In 1819, another accession was received in the State of *Alabama*, and Congress created *Arkansas* into a territorial government. In 1820, *Maine* was separated from *Massachusetts*, made into a State, and admitted into the Union. In 1819, a treaty was made with Spain, by which *Florida* was ceded to the United States. This treaty was not finally ratified by the King of Spain till the year 1821. On the 1st of July of that year, General Jackson, who was governor of the West Florida, issued a proclamation, declaring the Spanish Government in that province ended, and that of the United States of America established.

On the 7th of July, the keys of the town of *Pensacola*, the archives, documents, and other articles mentioned in the inventories, were transferred to General Jackson, by the Spanish Commander. In this year *James Monroe* was nominated President for a second term of four years.

In 1824, two important treaties were concluded; one between the United States and Russia, determining the north-west boundary of the two countries, at the line of fifty-four

degrees and forty minutes of latitude north. The second, with England, for the suppression of the African slave trade. It was signed in London by plenipotentiaries specially appointed for the purpose.

The year 1825 was also signalized by the visit of the celebrated French General, Lafayette, to America. He arrived in New York harbour on the 13th of August, and proceeded to Staten Island, the residence of DANIEL D. TOMKINS, Vice-President of the United States. A committee of the New York City Corporation, and many distinguished citizens proceeded thither, to welcome him to their capital. Steamboats with thousands of passengers, and decorated with flags of all nations, escorted him to the city, where the whole population was waiting to welcome him: he who had perilled his life in the cause of their liberties. He was received by the civil officers of their city, and an address was delivered by the Mayor.

During the few days that he remained in New York deputations poured in, from all the principal cities of the Middle and Northern States, inviting him to visit them.

From New York, he proceeded to Boston, Portsmouth, New Hampshire, Savannah, New Orleans, Saint Louis, and back to Boston. This journey of five thousand miles was performed in the course of the year, and the same extraordinary marks of respect and attention were paid him throughout, as in the great cities. The whole nation joined in wishing health, happiness, honour, and long life to America's favourite adopted son.

He reached Washington during the session of Congress, and that body voted him the sum of two hundred thousand dollars (£40,000) and a township of land, six miles square, to be located in any of the unappropriated lands, where the President should direct. A suitable acknowledgment for such an immense and unexpected gift, added to former and considerate bounties was made by the General, describing himself as an old American soldier, and an adopted son of the United States, two titles dearer to his heart than all the treasures of the world.

On a second visit to Boston, he listened to an address from the lips of the eloquent *Daniel Webster*. Wherever he went, the people rose in a mass to welcome him to their homes, and when he wished to return to France, a new American frigate, the *Brandywine*, was fitted out for his accommodation. In this vessel, he set sail on the 7th of

September, 1825, for his native country. The authorities of Washington, Georgetown, and Alexandria, the principal officers of the Government, civil, military, and naval, members of Congress, and other citizens assembled on that day at the President's house to take leave of the General. President Adams addressed him with dignity, but with evident emotion, and bade him adieu.

At the usual term of office an active canvass was commenced for the election of the successor of Mr. Monroe. Four candidates were proposed: Messrs. Jackson, Adams, Clay, and Crawford. Mr. Adams was elected, and Mr. Monroe retired.

The principal event of Mr. Monroe's term of office was the celebrated doctrine preached by him, and known as *Monroe's doctrine*, in which he says: AMERICA TO THE AMERICANS, AND TO NO ONE ELSE, and advising the inhabitants to unite and to repel all foreign invasion in America.

JOHN QUINCY ADAMS, 1825—1829.

JOHN QUINCY ADAMS, the sixth President of the United States, entered upon the duties of his office in March, 1825. In his inaugural address he insisted on the discarding of every remnant of rancour against each other, to be all friends, and to work harmoniously for the welfare and prosperity of the country.

During his administration, an important treaty was concluded with the Indian tribe of the *Creeks*. By this treaty the Creeks ceded all the lands lying within the boundaries of the State of Georgia, inhabited by them, in exchange for others situated westward of the Mississippi, on the Arkansas River. A treaty was also concluded with the Indian tribe of *Kandas*, ceding all their lands, within and without the limits of Missouri, excepting a reservation on the Kansas River, thirty miles square, including their villages. For these lands, the *United States* agreed to pay them, 3,500 dollars yearly, during twenty years, to provide for their education and civilisation, and to furnish them with a specified quantity of agricultural stock.

Another treaty was also concluded with the *Great and Little Osages*, for their lands situated in Arkansas and elsewhere, for an annuity of 7,000 dollars for twenty years, and *other provisions*.

General conventions of peace, amity, navigation, and commerce were made during the years 1825-1826 with the Republics of *Columbia* and *Central America*, and with the King of Denmark.

The Tariff Bill, which was enacted by Congress in the Session of 1828, produced the most violent commotion in the Southern States, and was passed only by a very small majority.

On the anniversary of American Independence, 1826, two of the ex-presidents of the United States departed this life. JOHN ADAMS died at Quincy in the ninety-first year of his age; THOMAS JEFFERSON, at Monticello, Virginia, in his eighty-third year.

In November, 1858, Andrew Jackson, of Tennessee, was elected to succeed Mr. Adams.

ANDREW JACKSON, 1829—1837.

ANDREW JACKSON, the seventh President of the United States, was installed in his office in March, 1829. JOHN C. CALHOUN taking the seat of Vice-President.

The principal topic of discussion upon the assembling of Congress was the Tariff Act, which had been, from the moment of its passing, a subject of violent contention and popular irritation between the Northern and Southern States; but General Jackson in his message carried the doctrines of protecting home productions, till they could compete with foreign importation, to their utmost length. An Act was passed, opening the American ports for the admission of British vessels from the colonies with the same cargoes which might be brought, and at the same duties that were payable by American vessels, suspending the alien duties on British vessels and cargoes. In consequence of this Act, the United States were allowed the benefit of the Act of Parliament of 1825, which, upon certain terms, allowed foreign nations a participation in her colonial trade.

In 1832, an act was passed which lowered the duties upon some articles, but it was far from meeting the wishes of *Georgia* and *Carolina*. A convention assembled at Columbia from all parts of the State of South Carolina, and declared the tariff acts of 1828 and 1832 null and void, and not binding, and that if the United States should attempt to force them, threatened to form a separate government for South Carolina.

Whilst civil war and a dissolution of the Union seemed thus to be approaching, General Jackson, his four years

having expired, was re-elected President. In his message after his re-election, he announced that he would not hesitate to bring the Southerners back to their duty, by force if necessary. He also attacked the solvency of the United States Bank, intimating that it was no longer a safe depository for the public funds.

Towards the close of December, 1832, a bill was introduced into Congress, by which it was proposed to reduce the duties. This did not meet the views of either party. At last these difficulties were overcome by the introduction of a bill by Henry Clay, of Kentucky, known hereafter as the Compromise Bill. By it, all duties were to be gradually reduced till 1842, when they were to reach the minimum of twenty per cent. *ad valorem*. This bill was carried through both houses of Congress, and received the sanction of the President.

At the expiration of the Charter of the United States Bank, a large number of State banks were created, which produced and nourished all manner of wild speculations, particularly in appropriated public lands.

During the winter session of 1835, a bill was brought before Congress recognising the Independence of Texas, but it was postponed. The Indian war was continued in Florida during the year 1836, and many plantations and settlements in the neighbourhood of St. Augustine were ravaged, inhabitants slain, and negroes taken away by the enemy. There was also a war with the Indians of the north-western frontier called *Black Hawk's war*, which resulted in the capturing and deposing of that chief.

In the early part of 1837, General *Santa Anna*, the President of the Republic of Mexico, was made a prisoner by the Texans, and subsequently set at liberty. He visited Washington, whence after a short stay, he returned to Mexico.

Moore's Electric Telegraph was discovered in 1832.

On the 11th of November, 1836, elections for the nomination of a new President took place, and MARTIN VAN BUREN, was elected.

MARTIN VAN BUREN, 1837—1841.

MARTIN VAN BUREN, the eighth President of the United States, took possession of the chair on the 4th of March, 1837. The New President was scarcely seated when a severe commercial crisis burst all over the country. It was at New Orleans that the first failure of consequence was

declared. New York, Philadelphia, Boston, Baltimore, Albany, and many others followed suit. The banks ceased their payments in specie. Even the mammoth bank of the United States bent to the fierce tempest and imitated the example of the rest. One sentiment pervaded all classes: the anticipation of universal ruin, and individual beggary. All works were stopped. A Bill was passed suspending the payment of the fourth installation of the surplus revenue to the States until the 1st day of January, 1839. Bills were passed authorising the issue of treasury notes, for the extension of the payment of revenue bonds for a short period, authorising the warehousing in bond of imported goods for a term of three years, organising a sub-treasury system, whereby the nation should become its own banker, but this last Bill was postponed.

When the Congress re-assembled on the 4th of December, the Sub-Treasury Bill was ultimately rejected in 1838. During this year the banks generally resumed specie in payments, the effects of the commercial catastrophe were rapidly subsiding, and the harvest was abundant.

A convention for fixing the boundaries of the United States and Texas was concluded at Washington, on the 25th of April. Great dismay was created in the commercial world towards the close of the year by the suspension of specie payments on the part of all the principal banks.

Negotiations were opened respecting the boundaries of the United States and the British provinces.

The first Transatlantic trip was done in 1832, by an American steamer.

In November, the time of the election of a new President being arrived, WILLIAM HENRY HARRISON was elected to the post, and JOHN TYLER, of Virginia, as Vice-President.

WILLIAM HENRY HARRISON, 1841.

WILLIAM HENRY HARRISON, the ninth President of the United States, entered on duty in March, 1841; but his inaugural address was the only act of his administration, having died on the 4th of April, within one month of his inauguration. He was the first President who died in office.

General Harrison was in the sixty-ninth year of his age.

The funeral took place on the 7th of April. The order of the ceremony was very imposing; the procession extended over two miles, and was the longest ever witnessed in Washington. A sentiment of the profoundest grief pervaded

every part of the Union on this melancholy occasion. A national fast was proclaimed, and the affection and respect of the people were testified by all sorts of public demonstrations.

JOHN TYLER, 1841—1845.

According to Constitution, M. TYLER now became President. He arrived at Washington on the 5th of April, 1841, and was immediately sworn into office. Mr. Southard, President of the Senate, became Vice-President. On the 8th, the new President issued an address suited to the occasion, in which, after lamenting the decease of General Harrison, he expressed his intention of carrying into practice what he conceived to have been that gentleman's principles. The Cabinet chosen by General Harrison was retained in office.

On the 31st of May, the twenty-seventh Congress assembled at Washington. A message from the President was read, His views with regard to foreign policy were of a pacific character. He stated that the census showed the population to be seventeen millions, and that it had doubled in twenty-three years. It is during this administration that Colonel Fremont's Expedition to the West and to California was sanctioned.

A Bill for the establishment of a new Bank of the United States was presented, but was defeated twice.

A Bill was passed for the distribution of the proceeds of the public lands.

On the 9th of August, 1842, a new treaty was made with England, concerning the north-eastern boundaries between the two countries, but more especially for the suppression of the slave trade.

During the Session of Congress which closed June, 1844, the principal subjects of attention were the modification of the Tariff, and the annexation of Texas to the United States, but the treaty negotiated to that effect by the Secretary of State and the Texan Commissioners, and signed by the President, was rejected by the Senate.

One of the most remarkable events during this administration is the deliberate repudiation by several of the States of the public engagements which they had contracted by bonds, on the faith of which, private individuals had advanced money to them.

At the expiration of office of M. TYLER, JAMES K. POLK, of Tennessee, was elected President.

JAMES K. POLK, 1845—1849

JAMES K. POLK, the eleventh President of the United States, entered upon the duties of his office on the 4th day of March, 1845.

President Polk had always been unfavourable to the establishment of a National Bank, or to the abolition of slavery. He was of opinion that each State had the exclusive power to regulate this subject according to its own judgment, and that the general Government had no power to interfere with, or to act upon the subject of domestic slavery, the existence of which, in many of the States, was expressly recognized by the Constitution of the United States.

It was during this administration that war was declared between the United States and Mexico, resulting in the capture of the Capital by the North Americans, and the treaty passed between the two countries on the 2nd February, 1848. By that treaty, which was ratified on the 16th of March, 1848, by the American Congress, and on the 30th of May of the same year by the Mexican Congress, Upper California was ceded to the United States on payment of fifteen millions of dollars, or (£3,000,000).

The name of *Polkos*, from *Polk*, was given to the Mexicans, who pronounced against the legal government of Mexico in 1847.

In November, 1848, ZACHARY TAYLOR was elected President to succeed to Mr. POLK.

ZACHARY TAYLOR, 1849.

ZACHARY TAYLOR, the twelfth President of the United States, took possession of the chair on the 4th of March, 1849. It was during this administration that the rich gold placers of California attracted the general attention of the world, and attracted such a large number of immigrants of all nationalities with the extraordinary result that, in a few years, a magnificent new State was created, in a place which for centuries had only been known as a wilderness.

Zachary Taylor was born in the county of Orange, Virginia, on the 24th of September, 1784. At the early age of twenty-four, he was nominated lieutenant, and in that capacity, he took part in the war against the English, and also against the Indians. He was made a colonel in 1834. In 1836, he took part in the Florida wars. In 1845, he was sent to Texas, and intrusted with the defence of the frontier

of this new State. He occupied *Corpus Christi* until the 12th of March, 1846, when he took the offensive against the Mexicans, whom he routed.

He died at Washington, on the 1st of July, 1850, after a little over one year of office. He was succeeded by the then Vice-President, Millard Fillmore.

MILLARD FILLMORE, 1850—1853.

MILLARD FILLMORE, the thirteenth President of the United States, succeeded General Taylor in July, 1850, and remained in office till 1853. Millard Fillmore was born at Summer Hill (New York) on the 7th of January, 1800, of a poor English family. He was educated in the parish school. At the age of nineteen, he was articled as clerk with Barrister Wood, and during the time that he remained with him, he studied assiduously and took his degree. In 1829, he began his political career as the representative of the county of Eric (New York). He was nominated Member of the Congress in 1832, and was re-elected several times in the same capacity. In 1848, he was elected Vice-President. He died at Buffalo, the 10th of March, 1874.

FRANKLIN PIERCE, 1853—1857.

FRANKLIN PIERCE, the fourteenth President of the United States, entered upon the duties of his office in March, 1853, shortly before my arrival in that country. During his administration was held the first American International Exhibition, that of New York, which was a great success. The handsome Central Park of New York was also begun during his administration.

Franklin Pierce was born at Hillborough, New Hampshire, on the 23rd of March, 1804. At first he worked as a farmer, but this work being uncongenial to him, at the age of twenty he left farming, and went to study law at Northampton School, Massachusetts, and in the office of Judge Parker, in Amherst. He took his degree of Barrister-at-Law in 1827, and went to practice in his native town, which elected him two years afterwards as their representative in the Legislative Assembly of the State. He remained in that post from 1829 to 1832. In 1833 he was elected Member of the Congress, and in 1839 Senator. In 1842 he retired to Concordia, New Hampshire, and practised as a barrister. In 1847, at the time of

the declaration of war with Mexico, he took service in the army, was wounded, and appointed colonel. After the successful attack of Vera Cruz, he was appointed General. In November, 1852, he was elected President, with a large majority. He died in September, 1869.

JAMES BUCHANAN, 1857—1861.

JAMES BUCHANAN, the fifteenth President of the United States, took possession of the Presidency on the 4th of March, 1857. He had occupied the post of Secretary of State during the administration of President Polk. During his term of office, his chief ambition was the enlargement of the United States. He was always very prudent, and was considered a good administrator.

James Buchanan was born at Stony-Battes, in the county of Franklin, Pennsylvania, on the 23rd of April, 1795. His father was Irish, and the possessor of a farm. At the age of 14, Buchanan was sent to the College of Dickinson, Carlisle, where he took his degrees. In 1809, he was articled to Lawyer James Hopkins, of Lancaster, and under his direction he studied law. In 1814, he was elected a Member of the Legislature of Pennsylvania. Six years after, he was elected Member of the Congress of the United States, where he remained up to 1831. After this, he entered the diplomatic career, and was sent to Russia by General Jackson. He came back to the United States in 1853. In 1856 he was elected President. He died at Lancaster, Pennsylvania, on the 1st of June, 1868.

ABRAHAM LINCOLN, 1861.

ABRAHAM LINCOLN, the sixteenth President of the United States, succeeded Mr. Buchanan, and entered upon the duties of office in March, 1861.

It was during Lincoln's administration that one of the most bloody civil wars (1863—1865) took place between the Northern and Southern States, in consequence of the abolition of slavery. In that short time, 740 millions of pounds sterling were spent, and 656,300 men were killed.

The beginning of it, was the attack of Fort Finter by the Sudists, who wanted to separate themselves from the North. To this, Abraham Lincoln replied by the raising of 75,000 men, the blocus of the ports of the Carolinas, Virginia, etc. Everyone remembers the gigantic exertions made by each side

to attain its purpose, and the heroic deeds achieved by both during this long and sanguinary war, resulting in the complete victory of the North, and the lamentable death of Abraham Lincoln.

The war of secession was just ended, peace was restored, and business was progressing actively everywhere, when this foul act was perpetrated. On the 14th of April, 1865, the President and his wife assisted for the first time, since the war, to a theatrical representation, accompanied by Mrs. Harris and Mr. Rashburn. They occupied the front of the stage on the left of the theatre. The play represented, was a gay one, *Our American Cousin*. The President leaning forward, his head between his hands, was entirely absorbed with the play, when a shot was heard, and at the same time a man was seen jumping in the front of the stage, a dagger in hand, and crying *Sic semper tyrannis*. All the spectators rose, the murderer ran away in the lobby, pursued by a lawyer, Mr. Stuart, who very nearly overtook him, but the murderer escaped by shutting a door in his face.

The President had been shot in the head. He was carried immediately into a house, close by the theatre, where he died the next morning at 7.20.

As to the murderer, who had been able to make his escape on horseback, he had been recognised by another actor, one of his comrades, as one named John Wilkes Booth. This Booth had been mixed up in many political events. He was an enthusiastic Sudist; he declared that he murdered President Lincoln to avenge the defeat of the Sudists. He was discovered by the police in a hut near Port Royal, Maryland, where he had taken refuge with one of his accomplices. Summoned to deliver themselves up, the two criminals wavered. The accomplice, Harold, surrendered, but Booth decided to resist. Then the police set fire to the hut, and when Booth appeared, trying to escape, he was shot. The corpse was deposited on board a monitor, from where it disappeared several days after. This dreadful drama ended in absolute mystery, and the slavery, to the maintenance of which Booth had sacrificed President Lincoln, was nevertheless definitely abolished.

On the morrow of the assassination of President Lincoln, Minister Seward was also murdered.

Abraham Lincoln was born the 12th of February, 1809, in the State of Kentucky. Son of a pioneer, from the early age of seven, he took part in the hard labour of clearing land.

Without a regular instruction, and obliged to work for his living, At the age of nineteen, he made a voyage to New Orleans, working on board of a boat to pay his passage. Then he turned carpenter, grocer, etc., and, lastly, a soldier, fighting the Indians, after which he began to study alone, and succeeded so well, that he was able to pass his examination as a lawyer. From that date, he began his political career.

During four sittings, he took part in the Legislature of Illinois. From 1847 to 1849, he was a Member of the Congress. In 1852, he joined the Abolitionists, and in November, 1860, he was elected President of the United States. He placed at the head of his Cabinet Messrs. M. Seward and Cameron. In 1861, he started from Springfield to Washington, where he was enthusiastically received ; but it has been said that even then, notwithstanding the triumphal reception made to him, he had already misgivings about his security.

In 1864, he was re-elected for the second time with an immense majority.

The Atlantic Telegraph, connecting Europe and America, was completed in 1862, during his first term of office.

ANDREW JOHNSON, 1865—1869.

The consequence of the atrocious act committed by Booth, was that Andrew Johnson became the seventeenth President of the United States according to Constitution. He took office in April 1865, and during the whole of his term he was in contest with the other powers. The functionaries proposed by him, were not accepted by the Senate, and even his Ministers were hostile to him. He was also put on his trial, but discharged.

Andrew Johnson was born in Raleigh, Carolina, on the 29th of December, 1806.

He lost his father at the early age of four. At ten, he was apprenticed to a tailor, and remained with him seven years without having ever been to school, but in learning his trade, he made up his mind to learn at all cost, and so he did, taking several hours out of his sleep for that noble purpose. When he left his master, he worked for a while at day wages, soon after he went West, taking with him his mother, whom he maintained from his work. He stopped at Greenwich, Tennessee, where he worked as a journeyman. He married there, and after a time he worked on his own account. With the help of his wife, he learned to write, and acquired some

elementary knowledge. In 1828, he was elected Alderman of his village. In 1830, he was elected Mayor. In 1843, he was elected Member of the Congress, and in 1863, Governor of Tennessee. In 1864, he was elected Vice-President, hence, his re-emplacing President Lincoln, when this last was murdered.

President Johnson died the 31st of July, 1875, in the county of Carter.

ULYSSE SIMPSON GRANT, 1869—1877.

ULYSSE SIMPSON GRANT, the eighteenth President of the United States, entered upon the duties of his office in March, 1869. He was so popular and so esteemed by all parties that at the end of his first term, in 1873, he was re-elected without opposition. It was during his second term of office that the Centennial Exhibition of Philadelphia, which was such a great success, was decided upon, and successfully organized.

This Exhibition was the first step of reconciliation between the Northern and Southern States. General Grant's peaceful administration will always be remembered as that of reconciliation, peace and progress. In 1869, the Pacific Railway was opened during his administration.

Ulysse Simpson Grant was born at Point Pleasant, Ohio, on the 27th of April, 1822. At the age of seventeen, he entered at the Military School of Westpoint. He left in 1843 as a Second Lieutenant in the Infantry. In 1848, he took a distinguished part in the Mexican War, was promoted Lieutenant after the battle of Molino del Rey, and Captain after that of Chapultepec, in September, 1847.

He left military service in 1854, and took the direction of a tanyard, established by his father; after which he started as a farmer, in the county of San Luis, Missouri. In 1860, he went away to Galena, Illinois, where he was busy in the same pacific business when the war was declared between the North and the South. In the month of April, 1861, the Governor of Illinois appointed him *Aide-de-camp* to the Chief Commander of the State Militia. Soon after, he was nominated Colonel of the 20th Regiment, then General of the Illinois Volunteers. He assisted in that capacity to many sanguinary battles, and achieved great success, especially at the battle of Wickbury, which made him famous among his countrymen. His popularity was so great after the battle of Richmond, that he was unanimously elected President of the United States. He received numerous

addresses from all parts of the country. In his short inaugural address on the day of his installation as President, he manifested that he did not belong to any particular political party. On the 6th of November, 1872, he was re-elected for another term with a great majority. At the end of his second term, he visited Europe, where he was welcomed by all. A suitable pension was voted him, when he retired from office.

RUTHERFORD B. HAYES, 1877—1881.

RUTHERFORD B. HAYES, the nineteenth President of the United States, entered into possession of the presidential chair in March, 1877. I was in Philadelphia when the election took place, and I have previously given a description of what these elections are in the United States. If not seen, one could hardly believe what expenses and what excesses are occasioned by the election of a President in that country; but what is admirable is the way how every one retires to his own business when the election is over. The Phonograph was invented by Edison, in 1877, during Hayes' term of office.

Rutherford Birchard Hayes was born on the 4th of October, 1822, in Delaware, Ohio. He went first to the College of Kenyon. From that place, he went to the University of Cambridge, where he studied law. In Cincinnati he acted as solicitor and acquired fame as a lawyer. When the war of secession was declared, he engaged himself as a private soldier, but quickly distinguished himself, and was successively promoted from Lieutenant to General. At the end of the war, he retired from the service, but soon after he was sent to Congress, where he represented his county. After that, he was appointed twice Governor of Ohio. In 1876 he was chosen as a candidate by the Republicans, and was elected President of the United States.

JAMES A. GARFIELD, 1881.

JAMES A. GARFIELD, the twentieth President of the United States, entered upon the duties of the office in March 1881, but he occupied that post only for a few months, having been shot at the railway station by the murderer, Charles Guiteau, a fanatic, on the 5th of July, 1881. He was successively transported to Longbranch and elsewhere, and for a little time it was thought that he would recover, but on the 19th of September, he died at Longbranch from the consequences of his wounds. A national subscription was made

in favour of his widow. Two millions five hundred thousand dollars were raised for that purpose. James Abraham Garfield was born the 19th of November, 1831, at Orange, Ohio. At an early age, he had to work for his living and that of his mother, which he always helped as much as he could. He worked as a journeyman carpenter, and also as a steersman on a boat. In the evening, he used to go to a primary school, and learn all that he could. In 1849, he entered the College of Chester, Ohio, and one year after he obtained his brevet as Schoolmaster. In 1880, he was elected President of the United States.

CHESTER A. ARTHUR, 1881—1885.

According to Constitution, Mr. Chester A. Arthur, Vice-President, became the twenty-first President of the United States.

Chester A. Arthur was born in Fairfield, Franklin County, Vermont, on the 5th of October, 1830. His father emigrated from Ireland to the United States in his eighth year, and died in Newtonville, near Albany, in October, 1875. Chester A. Arthur was educated at Union College, and was graduated in the class of 49. After leaving college, he taught a county school during two years in Vermont, and then having managed by rigid economy to save about \$500 he started for New York, and entered the law office of ex-Judge Culver as a student. After being admitted to the bar, he formed a partnership with his friend, Henry D. Gardiner, with the intention of practising in the West, but in the end they returned to New York, where they entered upon a successful career almost from the start. Soon after he married the daughter of Lieutenant Herdon, United States Navy, who was lost at sea. Chester A. Arthur rendered great services in the emancipation of slaves, and won several cases in their favour. Previous to the outbreak of the Secession War, Chester A. Arthur, was Judge Advocate of the 2nd Brigade of the New York State Militia, and Governor Edwin D. Morgan, soon after his inauguration, selected him to fill the position of Engineer-in-Chief of his staff. In 1861, he held the post of Inspector-General, and soon afterwards was advanced to that of Quartermaster-General, which he held until the expiration of Morgan's term of office. No higher encomium can be passed upon him than the mention of the fact that although the war account of the State of New York was at least ten times larger than that of any other state, yet

it was the first audited and allowed in Washington, and without the deduction of a dollar, while the Quartermaster's accounts from other States were reduced from \$10,000,000 to \$1,000,000. When Mr. Arthur became Quartermaster-General he was poor. When his term expired he was poorer still.

He had opportunities to make millions unquestioned. His own words in regard to this matter amply illustrate his character. "*If I had misappropriated five cents, and on walking down town saw two men talking on the corner together, I would imagine they were talking of my dishonesty, and the very thought would drive me mad.*"

At the expiration of Governor Morgan's term, Mr. Arthur returned to his law practise, and the firm of Arthur and Gardiner prospered exceedingly. Gradually he was drawn into the arena of politics. He nominated, and, by his efforts, elected the Hon. Thomas Murphy a State Senator. When the latter resigned the collectorship of the Port of New York, November 20th, 1871, President Grant nominated General Arthur to the vacant position, and four years later when his term expired re-nominated him, an honour that had never been shown to any previous collector in the history of the Port.

When James A. Garfield was elected President of the United States, in 1880, General Arthur was unanimously elected Vice-President. On the 4th of March, 1881, he delivered a brief but eloquent inaugural address and assumed his place as the second officer of the Republic.

Immediately after the death of President Garfield, General Arthur took the oath of office as President of the United States. The administration of the oath was followed by the President's brief inaugural address.

During Arthur's term, efforts were made to strengthen the relations of the United States with the other American nationalities. Representations were made by the Administration with a view to bringing to a close the war between Chili and the allied States of Peru and Bolivia.

President Arthur advised the establishment of a monetary union of the American countries to secure the adoption of a uniform currency basis. Provision for increased and improved consular representation in the Central American States was made. Negotiations were conducted with Colombia for the purpose of renewing and strengthening the obligations of the United States as the sole guarantor of the integrity of Columbian territory, and of the neutrality of any interoceanic canal to be constructed across the Isthmus of Panama.

From the British Government, a full recognition of the rights and immunities of naturalized American citizens of Irish origin was obtained, and all such that were under arrest in England or Ireland, as suspects, were liberated.

The reduction of letter postage from 3 cents for each half-ounce to 2 cents for one ounce was adopted. The fast mail and free delivery system were largely extended.

The act to regulate and improve the civil service of the United States was passed January 16th, 1883.

It was declared at the following Presidential Convention that "in the administration of President Arthur we recognize a wise, conservative, and patriotic policy, under which the country has been blessed with remarkable prosperity, and we believe his eminent services are entitled to and will receive the hearty approval of every citizen."

Mr. Arthur died suddenly of apoplexy, at his residence, No. 123, Lexington Avenue, New York City, Thursday morning, November 18th, 1886. President Cleveland, and his Cabinet, Chief-Justice Waite, ex-President Hayes, James G. Claine, Generals Sherman, Sheridan, and Schofield, and the surviving members of President Arthur's Cabinet, were in attendance.

GROVER CLEVELAND, 1885—1889.

GROVER CLEVELAND, the twenty-second President of the United States, took possession of the chair in March, 1885. It was during his administration that it was decided to co-operate officially to the Paris International Exhibition of 1889, and it was a great success for that country. Their display was conspicuous, and courted the attention of all visitors. General Franklin, the Chief Commissioner, by his energy and affability, contributed greatly to that end.

Four new States were added to the Union by Congress, that of North Dakota, South Dakota, Washington, and Montana. Electricity was adopted for traction on 436 tramways, on 3,522 miles of track.

Stephens Grover Cleveland was born at Caldwell, New Jersey, on the 18th of March, 1837. He studied at Clinton's Academy. After that, he entered as clerk in a commercial house at Fayetteville. When in Buffalo with his uncle, he studied law, and was admitted to the Court of that town in 1859. In 1870, he was elected sheriff of the County of Erie, and at the expiration of his office, he took the direction of a

